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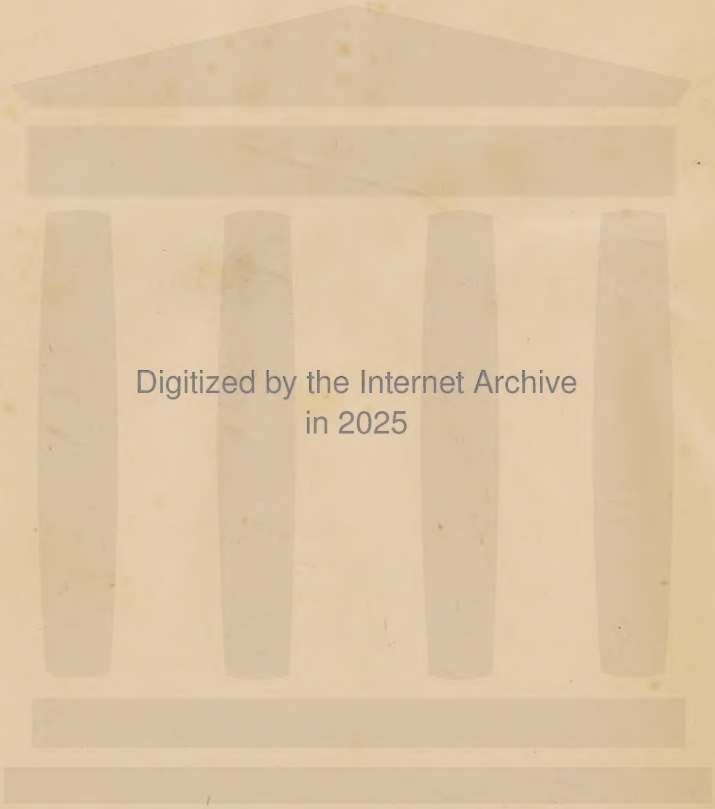

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NATIONAL EDUCATIONAL ASSOCIATION

JOURNAL

OF

PROCEEDINGS AND ADDRESSES

OF THE

THIRTY-EIGHTH ANNUAL MEETING

HELD AT

LOS ANGELES, CALIFORNIA

JULY 11–14, 1899

1899

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CONSTITUTION

OF THE

NATIONAL EDUCATIONAL ASSOCIATION

PREAMBLE

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

CONSTITUTION

ARTICLE I—NAME

This association shall be styled the NATIONAL EDUCATIONAL ASSOCIATION.

ARTICLE II—DEPARTMENTS

Section 1. It shall consist of eighteen departments: first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, for the Education of the Deaf, Blind, and Feeble-minded; seventeenth, of Indian Education; and eighteenth, the National Council of Education.

Sec. 2. Other departments may be organized in the manner prescribed in this constitution.

ARTICLE III—MEMBERSHIP

Section 1. There shall be three classes of members, namely, active, associate, and corresponding.

Sec. 2. Teachers and all who are actively associated with the management of educational institutions, including libraries and periodicals, may become active members. All others who pay an annual membership fee of two dollars may become associate members. Eminent educators not residing in America may be elected by the Directory to be corresponding members. The number of corresponding members shall at no time exceed fifty.

Sec. 3. Any person eligible may become an active member upon application indorsed by two active members, and the payment of an enrollment fee of two dollars and the annual dues for the current year.

All active members must pay annual dues of two dollars, and will be entitled to the volume of proceedings without "coupon" or other conditions. If the annual dues are not paid within the fiscal year, membership will lapse, and may be restored only on payment of the enrollment fee of two dollars and the annual dues for the current year. All life members and life directors shall be denominated active members, and shall enjoy all the powers and privileges of such members without the payment of annual dues.

Associate members may receive the volume of proceedings in accordance with the usual "coupon" conditions, as printed on the membership certificate.

Corresponding members will be entitled to the volume of proceedings without the payment of fees or other conditions.

Sec. 4. The names of active and corresponding members only will be printed in the volume of proceedings, with their respective educational titles, offices, and addresses, the list to be revised annually by the Secretary of the association.

ARTICLE IV—OFFICERS

Section 1. The officers of this association shall consist of a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, a Board of Trustees, and an Executive Committee, as hereinafter provided.

Sec. 2. The Board of Directors shall consist of the President of the National Educational Association, First Vice-President, Secretary, Treasurer, chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the association for the term of one year, or until their successors are chosen, and of all life directors elected previous to July 10, 1895.

All past presidents of the association now living (July 10, 1895), and all future presidents at the close of their respective terms of office, and the United States Commissioner of Education shall be life directors of the association.

The President of the National Educational Association, First Vice-President, Treasurer, chairman of the Board of Trustees, and a member of the association to be chosen annually by the Board of Directors, which member shall hold office for one year, shall constitute the Executive Committee.

Sec. 3. The elective officers of the association, with the exception of the Secretary, shall be chosen by the active members of the association by ballot, unless otherwise ordered, on the third day of each annual session, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual session subsequent to their election, and until their successors are chosen, except as hereinafter provided.

Sec. 4. Each department shall be administered by a president, vice-president, secretary, and such other officers as it shall deem necessary to conduct its affairs; but no person *shall be elected to any office of the association, or of any department, who is not, at the time of the election, an active member of the association.*

Sec. 5. The President shall preside at all meetings of the association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence, the first vice-president in order, who is present, shall preside; and in the absence of all vice-presidents a *pro-tempore* chairman shall be appointed on nomination, the Secretary putting the question.

Sec. 6. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the association and all meetings of the Board of Directors, and shall conduct such correspondence as the directors may assign, and shall have his records present at all meetings of the association and of the Board of Directors. The secretary of each department shall, in addition to performing the duties usually pertaining to his office, keep a list of the members of his department.

Sec. 7. The Treasurer shall receive, and under the direction of the Board of

Trustees hold in safe-keeping, all moneys paid to the association; shall expend the same only upon the order of said board; shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts, ending the 1st day of July each year, he shall render to the Board of Trustees, and, when approved by said board, he shall report the same to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the association next succeeding that for which he is elected.

Sec. 8. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the association, excepting those herein intrusted to the Board of Trustees; shall make all necessary arrangements for its meetings, and shall do all in its power to make it a useful and honorable institution. Upon the written application of twenty active members of the association for permission to establish a new department, it may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the others. The formation of such department shall in effect be a sufficient amendment to this constitution for the insertion of its name in Art. II, and the Secretary shall make the necessary alterations.

Sec. 9. The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the association, who shall be a member *ex officio* during his term of office. At the election of the trustees in 1886, one trustee shall be elected for one year, one for two years, one for three years, and one for four years; and annually thereafter, at the first meeting of the Board of Directors held prior to the annual meeting of the association, one trustee shall be elected for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership therein. The Board of Trustees thus elected shall constitute the body corporate of the association, as provided in the certificate of incorporation under the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, dated the 24th day of February, 1886, at Washington, D. C., and recorded in Liber No. 4, "Acts of Incorporation for the District of Columbia."

Sec. 10. It shall be the duty of the Board of Trustees to provide for safe-keeping and investment of all funds which the association may receive from donations; and the income of such invested funds shall be used exclusively in paying the cost of publishing the annual volume of proceedings of the association, excepting when donors shall specify otherwise. It shall also be the duty of the board to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the association acting under the authority of the Board of Directors; and, when practicable, the trustees shall invest all surplus funds exceeding one hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the association for the previous year.

Sec. 11. The Board of Trustees shall elect the Secretary of the association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of office for a period not to exceed four years.

ARTICLE V—MEETINGS

Section 1. The annual meeting of the association shall be held at such time and place as shall be determined by the Board of Directors.

Sec. 2. Special meetings may be called by the President at the request of five directors.

Sec. 3. Any department of the association may hold a special meeting at such time and place as by its own regulations it shall appoint.

Sec. 4. The Board of Directors shall hold its regular meetings at the place and not less than two hours before the assembling of the association.

Sec. 5. Special meetings may be held at such other times and places as the board or the President shall determine.

Sec. 6. Each new board shall organize at the session of its election. At its first meeting a committee on publication shall be appointed, which shall consist of the President and the Secretary of the association for the previous year, and one member from each department.

ARTICLE VI—BY-LAWS

By-laws not inconsistent with this constitution may be adopted by a two-thirds vote of the association.

ARTICLE VII—AMENDMENTS

This constitution may be altered or amended at a regular meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

BY-LAWS

1. At the first session of each annual meeting of the association there shall be appointed by the President a committee on resolutions; and at the third session of such meeting there shall be appointed a committee on nominations, consisting of one member from each state and territory represented, the same to be appointed by the President on the nomination of a majority of the active members in attendance from such state or territory; provided, however, that such appointment shall be made by the President without such nomination, when less than three active members from a state or territory are in attendance, and also when a majority of the active members in attendance from any state or territory shall fail to make a nomination.

The meetings of active members to nominate members of the nominating committee shall be held at 5:30 P. M. on the first day of the annual meeting of the association, at such places as shall be announced in the general program.

2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

3. Each paying member of the association shall be entitled to a copy of its proceedings.

4. No paper, lecture, or address shall be read before the association or any of its departments in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of proceedings without the consent of the association, upon approval of the Executive Committee.

5. It shall be the duty of the President, Secretary, and Treasurer of the association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the report of the Board of Trustees.

ADOPTED BY THE BOARD OF DIRECTORS

The establishment of a special fund from surplus receipts, after the expenses of the association have been paid, to be known as the "Emergency Fund," was recommended by the Board of Trustees, submitted to

the Board of Directors at Saratoga Springs, N. Y., July 12, 1892, and the following resolution was adopted :

Resolved, That there be established, as soon as the current expenses of the association will warrant, an Emergency Fund not to exceed $4,000. Said fund shall be subject to expenditure by the Board of Trustees in accordance with votes of the Board of Directors at any regularly called meeting. The said fund may be used for the purpose of meeting deficiencies of income of the association, and for such additional investigations and publications as may be determined by said Board of Directors.

ACT OF INCORPORATION

At a meeting of the Board of Directors of the National Educational Association, held at Saratoga Springs, N. Y., July 14, 1885, the following resolution was passed :

Resolved, That a committee of three be appointed to secure articles of incorporation for the National Educational Association, under United States or state laws, as speedily as may be.

N. A. Calkins, of New York; Thomas W. Bicknell, of Massachusetts, and Eli T. Tappan, of Ohio, were appointed such committee.

Under the authority of the resolution quoted above, and with the approval of the committee, and by competent legal advice, the chairman obtained a

CERTIFICATE OF INCORPORATION

We, the undersigned, Norman A. Calkins, John Eaton, and Zalmon Richards, citizens of the United States, and two of them citizens of the District of Columbia, do hereby associate ourselves together, pursuant to the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, under the name of the "National Educational Association," for the full period of twenty years, the purpose and objects of which are to elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States. . . . . To secure the full benefit of said act, we do here execute this our certificate of incorporation as said act provides.

In witness whereof we severally set our hands and seals this 24th day of February, 1886, at Washington, D. C.

NORMAN A. CALKINS. [L. S.]
JOHN EATON. [L. S.]
ZALMON RICHARDS. [L. S.]

Duly acknowledged before Michael P. Callan, notary public in and for the District of Columbia, and recorded in Liber No. 4, Acts of Incorporation for the District of Columbia.

CALENDAR OF MEETINGS

NATIONAL TEACHERS' ASSOCIATION

1857.—PHILADELPHIA, PA. (Organized.)
James L. Enos, Chairman.
W. E. Sheldon, Secretary.

1858.—CINCINNATI, O.
Z. Richards, President.
J. W. Bulkley, Secretary.
A. J. Rickoff, Treasurer.

1859.—WASHINGTON, D. C.
A. J. Rickoff, President.
J. W. Bulkley, Secretary.
C. S. Pennell, Treasurer.

1860.—BUFFALO, N. Y.
J. W. Bulkley, President.
Z. Richards, Secretary.
O. C. Wight, Treasurer.

1861, 1862.—No session.

1863.—CHICAGO, ILL.
John D. Philbrick, President.
James Cruikshank, Secretary.
O C. Wight, Treasurer.

1864.—OGDENSBURG, N. Y.
W. H. Wells, President.
David N. Camp, Secretary.
Z. Richards, Treasurer.

1865.—HARRISBURG, PA.
S. S. Greene, President.
W. E. Sheldon, Secretary.
Z. Richards, Treasurer.

1866.—INDIANAPOLIS, IND.
J. P. Wickersham, President.
S. H. White, Secretary.
S. P. Bates, Treasurer.

1867.—No session.

1868.—NASHVILLE, TENN.
J. M. Gregory, President.
L. Van Bokkelen, Secretary.
James Cruikshank, Treasurer.

1869.—TRENTON, N. J.
L. Van Bokkelen, President.
W. E. Crosby, Secretary.
A. L. Barber, Treasurer.

1870.—CLEVELAND, O.
Daniel B. Hager, President.
A. P. Marble, Secretary.
W. E. Crosby, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

1871.—ST. LOUIS, MO.
J. L. Pickard, President.
W. E. Crosby, Secretary.
John Hancock, Treasurer.

1872.—BOSTON, MASS.
E. E. White, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1873.—ELMIRA, N. Y.
B. G. Northrop, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1874.—DETROIT, MICH.
S. H. White, President.
A. P. Marble, Secretary.
John Hancock, Treasurer.

1875.—MINNEAPOLIS, MINN.
W. T. Harris, President.
W. R. Abbott, Secretary.
A. P. Marble, Treasurer.

1876.—BALTIMORE, MD.
W. F. Phelps, President.
W. D. Henkle, Secretary.
A. P. Marble, Treasurer.

1877.—LOUISVILLE, KY.
M. A. Newell, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1878.—No session.

1879.—PHILADELPHIA, PA.
John Hancock, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1880.—CHAUTAUQUA, N. Y.
J. Ormond Wilson, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1881.—ATLANTA, GA.
James H. Smart, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1882.—SARATOGA SPRINGS, N. Y.
G. J. Orr, President.
W. E. Sheldon, Secretary.
H. S. Tarbell, Treasurer.

1883.—SARATOGA SPRINGS, N. Y.
E. T. Tappan, President.
W. E. Sheldon, Secretary.
N. A. Calkins, Treasurer.

1884.—MADISON, WIS.
Thomas W. Bicknell, President.
H. S. Tarbell, Secretary.
N. A. Calkins, Treasurer.

1885.—SARATOGA SPRINGS, N. Y.
F. Louis Soldan, President.
W. E. Sheldon, Secretary.
N. A. Calkins, Treasurer.

1886.—TOPEKA, KAN.
N. A. Calkins, President.
W. E. Sheldon, Secretary.
E. C. Hewett, Treasurer.

1887.—CHICAGO, ILL.
W. E. Sheldon, President.
J. H. Canfield, Secretary.
E. C. Hewett, Treasurer.

1888.—SAN FRANCISCO, CAL.
Aaron Gove, President.
J. H. Canfield, Secretary.
E. C. Hewett, Treasurer.

1889.—NASHVILLE, TENN.
Albert P. Marble, President.
J. H. Canfield, Secretary.
E. C. Hewett, Treasurer.

1890.—ST. PAUL, MINN.
J. H. Canfield, President.
W. R. Garrett, Secretary.
E. C. Hewett, Treasurer.

1891.—TORONTO, ONTARIO.
W. R. Garrett, President.
E. H. Cook, Secretary.
J. M. Greenwood, Treasurer.

1892.—SARATOGA SPRINGS, N. Y.
E. H. Cook, President.
R. W. Stevenson, Secretary.
J. M. Greenwood, Treasurer.

1893.—CHICAGO, ILL.
(International Congress of Education.)
Albert G. Lane, President.
Irwin Shepard, Secretary.
J. M. Greenwood, Treasurer.

1894.—ASBURY PARK, N. J.
Albert G. Lane, President.
Irwin Shepard, Secretary.
J. M. Greenwood, Treasurer.

1895.—DENVER, COLO.
Nicholas Murray Butler, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1896.—BUFFALO, N. Y.
Newton C. Dougherty, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1897.—MILWAUKEE, WIS.
Charles R. Skinner, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1898.—WASHINGTON, D. C.
J. M. Greenwood, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1899.—LOS ANGELES, CAL.
E. Oram Lyte, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

NATIONAL EDUCATIONAL ASSOCIATION

OF THE UNITED STATES.

OFFICERS FOR 1898–99

GENERAL ASSOCIATION

E. ORAM LYTE	*President*	Millersville, Pa.
IRWIN SHEPARD	*Secretary*	Winona, Minn.
I. C. McNEILL	*Treasurer*	West Superior, Wis.

VICE-PRESIDENTS

James M. Greenwood, Kansas City, Mo.
W. W. Stetson, Auburn, Me.
E. B. Prettyman, Baltimore, Md.
H. C. White, Athens, Ga.
Joseph Swain, Bloomington, Ind.
J. R. Rightsell, Little Rock, Ark.
R. S. Bingham, Tacoma, Wash.
Frank P. Smith, Lawrence, Kan.
E. B. McElroy, Eugene, Ore.
McHenry Rhoads, Frankfort, Ky.
J. Y. Joyner, Greensboro, N. C.
S. N. Hopkins, Guthrie, Okla.

BOARD OF TRUSTEES

(See *Art. IV, sec. 9, of the constitution.*)

Albert G. Lane	*Chairman*	Chicago, Ill.
Nicholas Murray Butler	*Secretary*	New York, N. Y.

Albert G. Lane	Chicago, Ill.	Term expires July, 1899
J. Ormond Wilson	Washington, D. C.	Term expires July, 1900
F. Louis Soldan	St. Louis, Mo.	Term expires July, 1901
Nicholas Murray Butler	New York, N. Y.	Term expires July, 1902
E. Oram Lyte	Millersville, Pa.	*Ex officio*

EXECUTIVE COMMITTEE

(See *Art. IV, secs. 2 and 11, of the constitution.*)

E. Oram Lyte	*President*	Millersville, Pa.
James M. Greenwood	*First Vice-President*	Kansas City, Mo.
I. C. McNeill	*Treasurer*	West Superior, Wis.
Albert G. Lane	*Chairman Board of Trustees*	Chicago, Ill.
W. T. Harris	*Member by election*	Washington, D. C.

Irwin Shepard — *Secretary* — Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

(See *Art. IV, sec. 2, of the constitution.*)

E. Oram Lyte, Millersville, Pa.
James M. Greenwood, Kansas City, Mo.
I. C. McNeill, West Superior, Wis.
Albert G. Lane, Chicago, Ill.
Irwin Shepard, Winona, Minn.

Life Directors

(See *Art. IV, sec. 2, of the constitution.*)

Bicknell, Thomas W., Providence, R. I.
Board of Education, Nashville, Tenn.
*Brown, Leroy D., San Luis Obispo, Cal.
Butler, Nicholas Murray, New York, N. Y.
Canfield, James H., Columbus, O.
Cook, E. H., Yonkers, N. Y.

* Deceased.

Life Directors — *continued*

*Day, L. W., Canton, O.
Dougherty, Newton C., Peoria, Ill.
Fairchild, George T., Berea, Ky.
Garrett, W. R., Nashville, Tenn.
Gove, Aaron, Denver, Colo.
Graham, H. A., Mt. Pleasant, Mich.
Greenwood, J. M., Kansas City, Mo.
Hall, Caleb G., New Berlin, N. Y.
Harris, W. T., Washington, D. C.
Hunt, Mary H., Boston, Mass.
Jewett, A. V., Abilene, Kan.
Lane, Albert G., Chicago, Ill.
Marble, Albert P., New York, N. Y.
Marshall, T. Marcellus, Glenville, W. Va.
Parker, Charles I., South Chicago, Ill.
Phelps, W. F., St. Paul, Minn.
Pickard, Josiah L., Iowa City, Ia.
Pike, Joshua, Jerseyville, Ill.
Richards, Zalmon, Washington, D. C.
*Rickoff, Andrew J., New York, N. Y.
Sheldon, W. E., Boston, Mass.
Skinner, Charles R., Albany, N. Y.
Smart, James H., Lafayette, Ind.
Soldan, F. Louis, St. Louis, Mo.
Stratton, C. C., University Park, Ore.
Taylor, A. R., Emporia, Kan.
Teachers' Institute, Philadelphia, Pa.
White, Charles G., Lake Linden, Mich.
White, E. E., Columbus, O.
Wilson, J. Ormond, Washington, D. C.

Directors by Election

North Atlantic Division

Maine	John S. Locke	Saco
New Hampshire	Channing Folsom	Dover
Vermont	Mason S. Stone	Montpelier
Massachusetts	Will S. Monroe	Westfield
Rhode Island	H. S. Tarbell	Providence
Connecticut	F. E. Howard	Bridgeport
New York	A. S. Downing	Albany
New Jersey	James M. Green	Trenton

South Atlantic Division

Pennsylvania	George Howell	Scranton
Delaware	A. H. Berlin	Wilmington
Maryland	John D. Worthington	Belair
District of Columbia	W. B. Powell	Washington
Virginia	William F. Fox	Richmond
West Virginia	J. N. Deahl	West Liberty
North Carolina	G. A. Grimsley	Greensboro
South Carolina	J. Frank Fooshe	Blackville
Florida	L. W. Buchholz	Tampa

South Central Division

Kentucky	W. H. Bartholomew	Louisville
Tennessee	H. C. Weber	Nashville
Georgia	W. F. Slaton	Atlanta
Alabama	John D. Yerby	Mobile
Mississippi	E. E. Bass	Greenville
Louisiana	Warren Easton	New Orleans
Texas	O. H. Cooper	Carthage
Oklahoma	David R. Boyd	Norman
Arkansas	J. L. Holloway	Fort Smith
Indian Territory	W. A. Caldwell	Muskogee

North Central Division

Ohio	C. W. Bennett	Piqua
Indiana	David K. Goss	Indianapolis
Illinois	E. A. Gastman	Decatur
Michigan	Henry R. Pattengill	Lansing
Wisconsin	L. D. Harvey	Milwaukee
Iowa	W. M. Beardshear	Ames
Minnesota	George B. Aiton	Minneapolis
Missouri	John R. Kirk	Jefferson City
North Dakota	W. L. Stockwell	Grafton
South Dakota	Frank Crane	Watertown
Nebraska	Carroll G. Pearse	Omaha

*Deceased.

Directors by Election—*continued*

Western Division

Montana	J. P. HENDRICKS	Butte
Wyoming	ESTELLE REEL	Washington, D. C.
Colorado	L. C. GREENLEE	Denver
New Mexico	MRS. E. R. JACKSON	Silver City
Arizona	F. S. HAFFORD	Prescott
Utah	J. M. TANNER	Logan
Nevada	J. E. STUBBS	Reno
Idaho	J. C. BLACK	Albion
Washington	O. C. WHITNEY	Tacoma
Oregon	J. H. ACKERMAN	Portland
California	ELMER E. BROWN	Berkeley

DEPARTMENT OFFICERS

National Council

A. R. TAYLOR	*President*	Emporia, Kan.
JAMES H. VAN SICKLE	*Vice-President*	Denver, Colo.
MISS BETTIE A. DUTTON	*Secretary*	Cleveland, O.
JOHN DEWEY	*Executive Committee*	Chicago, Ill.
NICHOLAS MURRAY BUTLER	*Executive Committee*	New York, N. Y.
L. H. JONES	*Executive Committee*	Cleveland, O.

Kindergarten

MRS. MARIA KRAUS-BOELTÉ	*President*	New York, N. Y.
MISS FLORENCE LAWSON	*Vice-President*	Los Angeles, Cal.
MISS MARY F. HALL	*Secretary*	Spencer, N. Y.

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J. H. VAN SICKLE	*Secretary*	Denver, Colo.

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LANGDON S. THOMPSON	*Executive Committee*	Jersey City, N. J.

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FRANK H. HALL	*V.-Pres. Subdept. for the Blind*	Jacksonville, Ill.
A. E. OSBORNE	*V.-Pres. Subdept. for Ment. Deficient*	Glen Ellen, Cal.
Miss MARY McCOWEN	*Secretary*	Chicago, Ill.

NATIONAL EDUCATIONAL ASSOCIATION

OF THE UNITED STATES

OFFICERS FOR 1899–1900

GENERAL ASSOCIATION

O. T. CORSON	*President*	Columbus, O.
IRWIN SHEPARD	*Secretary*	Winona, Minn.
C. G. PEARSE	*Treasurer*	Omaha, Neb.

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J. A. FOSHAY, Los Angeles, Cal.
H. M. SLAUSON, Ann Arbor, Mich.
E. B. MCELROY, Eugene, Ore.
J. P. HENDRICKS, Butte, Mont.
J. M. GREEN, Trenton, N. J.
W. H. BARTHOLOMEW, Louisville, Ky.
W A. BELL, Yellow Springs, O.
W. F. SLATON, Atlanta, Ga.
L. W. BUCHHOLZ, Tampa, Fla.
MRS. GASTON BOYD, Newton, Kan.
GEORGE H. CONLEY, Boston, Mass.

BOARD OF TRUSTEES

(See *Art. IV, sec. 9, of the constitution.*)

ALBERT G. LANE	*Chairman*	Chicago, Ill.
NICHOLAS MURRAY BUTLER	*Secretary*	New York, N. Y.

J. ORMOND WILSON	Washington, D. C.	Term expires July, 1900
F. LOUIS SOLDAN	St. Louis, Mo.	Term expires July, 1901
NICHOLAS MURRAY BUTLER	New York, N. Y.	Term expires July, 1902
ALBERT G. LANE	Chicago, Ill.	Term expires July, 1903
O. T. CORSON	Columbus, O.	*Ex officio*

EXECUTIVE COMMITTEE

(See *Art. IV, secs. 2 and 11, of the constitution.*)

O. T. CORSON	*President*	Columbus, O.
E. ORAM LYTE	*First Vice-President*	Millersville, Pa.
C. G. PEARSE	*Treasurer*	Omaha, Neb.
A. G. LANE	*Chairman Board of Trustees*	Chicago, Ill.
W. T. HARRIS	*Member by election*	Washington, D. C.

IRWIN SHEPARD	*Secretary*	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

(See *Art. IV, sec. 2, of the constitution.*)

O. T. CORSON, Columbus, O.
E. ORAM LYTE, Millersville, Pa.
C. G. PEARSE, Omaha, Neb.
ALBERT G. LANE, Chicago, Ill.
IRWIN SHEPARD, Winona, Minn.

Life Directors

(See *Art. IV, sec. 2, of the constitution.*)

BICKNELL, THOMAS W., Providence, R. I.
BOARD OF EDUCATION, Nashville, Tenn.
BUTLER, NICHOLAS MURRAY, New York, N. Y.
CANFIELD, JAMES H., New York, N. Y.
DOUGHERTY, NEWTON C., Peoria, Ill.
FAIRCHILD, GEORGE T., Berea, Ky.

Life Directors.—*continued.*

Garrett, W. R., Nashville, Tenn.
Gove, Aaron, Denver, Colo.
Graham, H. A., Mt. Pleasant, Mich.
Greenwood, J. M., Kansas City, Mo.
Hall, Caleb G., New Berlin, N. Y.
Harris, W. T., Washington, D. C.
Hunt, Mary H., Boston, Mass.
Jewett, A. V., Abilene, Kan.
Lane, Albert G., Chicago, Ill.
Lyte, E. Oram, Millersville, Pa.
Marble, Albert P., New York, N. Y.
Marshall, T. Marcellus, Glenville, W. Va.
Parker, Charles I., South Chicago, Ill.
Phelps, W. F., St. Paul, Minn.
Pickard, Josiah L., Iowa City, Ia.
Pike, Joshua, Jerseyville, Ill.
Richards, Zalmon, Washington, D. C.
Sheldon, W. E., Boston, Mass.
Skinner, Charles R., Albany, N. Y.
Smart, James H., Lafayette, Ind.
Soldan, F. Louis, St. Louis, Mo.
Stratton, C. C., University Park, Ore.
Taylor, A. R., Emporia, Kan.
Teachers' Institute, Philadelphia, Pa.
White, Charles G., Lake Linden, Mich.
White, E. E., Columbus, O.
Wilson, J. Ormond, Washington, D. C.

Directors by Election

North Atlantic Division

Maine	John S. Locke	Saco
New Hampshire	Channing Folsom	Dover
Vermont	Mason S. Stone	Montpelier
Massachusetts	Will S. Monroe	Westfield
Rhode Island	George E. Church	Providence
Connecticut	C. N. Kendall	New Haven
New York	Augustus S. Downing	New York
New Jersey	H. Brewster Willis	New Brunswick

South Atlantic Division

Pennsylvania	H. W. Fisher	Pittsburg
Delaware	A. H. Berlin	Wilmington
Maryland	E. B. Prettyman	Baltimore
District of Columbia	W. B. Powell	Washington
Virginia	E. C. Glass	Lynchburg
West Virginia	J. N. Deahl	Claude
North Carolina	E. A. Alderman	Chapel Hill
South Carolina	F. C. Woodward	Columbia
Florida	W. N. Sheats	Tallahassee

South Central Division

Kentucky	McHenry Rhoads	Frankfort
Tennessee	H. C. Weber	Nashville
Georgia	William M. Slaton	Atlanta
Alabama	J. H. Phillips	Birmingham
Mississippi	R. B. Fulton	University
Louisiana	Warren Easton	New Orleans
Texas	Alexander Hogg	Fort Worth
Oklahoma	David R. Boyd	Norman
Arkansas	J. R. Rightsell	Little Rock
Indian Territory	W. A. Caldwell	Muskogee

North Central Division

Ohio	J. A. Shawan	Columbus
Indiana	J. W. Carr	Anderson
Illinois	J. H. Collins	Springfield
Michigan	D. W. Springer	Ann Arbor
Wisconsin	L. D. Harvey	Madison
Iowa	W. M. Beardshear	Ames
Minnesota	F. V. Hubbard	Red Wing
Missouri	W. T. Carrington	Jefferson City
North Dakota	W. E. Hoover	Park River
South Dakota	Frank Crane	Watertown
Nebraska	J. H. Miller	Lincoln
Kansas	Frank R. Dyer	Wichita

Directors by Election—*continued*

Western Division

Montana	SAMUEL D. LARGENT	Butte
Wyoming	ESTELLE REEL	Washington, D. C.
Colorado	L. C. GREENLEE	Denver
New Mexico	MRS. E. R. JACKSON	Silver City
Arizona	F. A. COOLEY	Tucson
Utah	F. B. COOPER	Salt Lake City
Nevada	J. E. STUBBS	Reno
Idaho	J. W. DANIELS	Boise
Washington	O. C. WHITNEY	Tacoma
Oregon	E. D. RESSLER	Eugene
California	JOHN SWETT	Martinez

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NICHOLAS MURRAY BUTLER	*Executive Committee*	New York, N. Y.
MISS LUCIA STICKNEY	*Executive Committee*	Cincinnati, O.
ELMER E. BROWN	*Executive Committee*	Berkeley, Cal.

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MISS ELLA C. ELDER	*Secretary*	Buffalo, N. Y.

Elementary

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J. W. DINSMORE	*Vice-President*	Beatrice, Neb.
MISS BETTIE A. DUTTON	*Secretary*	Cleveland, O.

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E. W. COY	*President*	Cincinnati, O.
G. B. MORRISON	*Vice-President*	Kansas City, Mo.
H. L. BOLTWOOD	*Secretary*	Evanston, Ill.

Higher

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WILLIAM F. KING	*Vice-President*	Mt. Vernon, Ia.
OSCAR J. CRAIG	*Secretary*	Missoula, Mont.

Normal

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MISS N. CROPSEY	*Vice-President*	Indianapolis, Ind.
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G. R. GLENN	*First Vice-President*	Atlanta, Ga.
J. A. SHAWAN	*Second Vice-President*	Columbus, O.
C. M. JORDAN	*Secretary*	Minneapolis, Minn.

Manual

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WILLIAM GEORGE BRUCE	*Secretary*	Milwaukee, Wis.
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EDWARD E. ALLEN	*V.-Pres. Subdept. for the Blind*	Overbrook, Pa.
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Indian Education

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EDGAR A. ALLEN	*Secretary*	Albuquerque, N. M.

*Deceased.

TREASURER'S REPORT

TO THE

NATIONAL EDUCATIONAL ASSOCIATION

JULY 1, 1898, TO JULY 1, 1899

MEETING AT WASHINGTON, D. C.

I. C. McNeill, Treasurer, in account with the National Educational Association

DR.

To balance from last report:		
In Union National Bank of Denver, unavailable	$ 132.23	
Cash in hand available	2,069.68	
		$ 2,201.91
To cash memberships, Washington meeting		1,753.75
To delayed receipts, Milwaukee meeting, 1897–98		297.00
To memberships collected by railway and steamship lines		18,225.00
To receipts from Irwin Shepard, Secretary:		
Memberships and enrollments	$2,398.07	
Back volumes sold	406.70	
Committee reports and miscellany	119.89	
		2,924.66
To income from Board of Trustees		3,086.68
To income from copyrights		74.10
To miscellaneous memberships		4.00
		$28,567.10

CR.

By expenses, Board of Trustees:		
J. N. Wilkinson, investigating bonds (913)*	$ 22.64	
J. Ormond Wilson, services as custodian (886)	100.00	
American Colonization Society, rent of depository (852, 883, 888, 914)	100.00	
		$ 222.64
By expenses of meetings:		
Columbus meeting, Department of Superintendence (902)		118.00
Washington meeting, departments (855):		
Kindergarten	$ 9.40	
Elementary	10.50	
Secondary	25.00	
Higher	24.28	
Normal	11.25	
Manual and Industrial	22.00	
Art	23.90	
Music	25.00	
Business	24.74	
Child Study	21.35	
Physical Training	25.00	
Science	25.00	
School Administration	57.50	
Library	25.00	
Deaf, Blind, etc.	14.00	
		343.92

* The numbers in marks of parenthesis refer to the orders issued by the Board of Trustees.

State managers (856), Washington meeting:		
Alabama	$ 20.00	
Arizona	2.10	
Arkansas	20.00	
California	19.64	
Colorado	22.25	
Connecticut	20.00	
Delaware	10.50	
District of Columbia	18.00	
Florida	18.00	
Georgia	20.00	
Illinois	20.00	
Indiana	20.00	
Iowa	19.50	
Kansas	20.00	
Kentucky	20.00	
Maine	17.05	
Maryland	9.00	
Michigan	20.00	
Minnesota	8.75	
Mississippi	19.75	
Missouri	20.00	
Nebraska	19.00	
New Jersey	20.00	
New Mexico	4.00	
North Carolina	20.00	
North Dakota	19.05	
Ohio	20.00	
Oklahoma	19.50	
Oregon	14.25	
Pennsylvania	41.55	
Pennsylvania, Western	8.45	
Rhode Island	7.00	
South Carolina	19.45	
South Dakota	20.00	
Tennessee	19.00	
Tennessee, 1896–97	18.00	
Utah	19.55	
Washington	19.00	
West Virginia	19.50	
Wisconsin	20.00	
Wyoming (901)	20.00	
		731.84
Clerks, Washington meeting:		
One assistant treasurer and twenty-seven clerks (854)	$ 886.35	
Two Secretary's clerks (854, 865)	31.00	
One President's clerk (864)	30.00	
		947.35
Stenographers, Washington meeting:		
One official stenographer (858)	$ 117 50	
One assistant stenographer (868)	15.00	
		132.50
Stationery and printing, Washington meeting:		
Official programs (866)	$ 100.00	
Miscellaneous programs and reports (869)	260.25	
Circulars, etc. (876)	54.25	
Platform tickets (873)	1.50	
Memorandum blanks (862)	11.00	
Miscellaneous stationery (861, 874, 875)	28.51	
		455.51
Miscellaneous, Washington meeting:		
Refunded memberships (856)	$ 40.00	
Messenger (867)	8.00	
Telephone (870)	2.00	
Freight, etc. (871)	18.92	
		68.92
		$ 3,021.08

By expense, special committees:			
Committee on Uniform Financial Reports, C. G. Pearse (908)		$ 7.00	
Normal-School Committee:			
N. C. Schaeffer (903)	$ 32.25		
A. G. Boyden (904)	47.68		
R. G. Boone (907)	30.82		
Z. X. Snyder (905, 918)	182.02		
H. H. Seerley (906, 923)	62.40		
F. M. McMurry (912, 925)	110.00		
		465.17	
Committee on College-Entrance Requirements:			
William Carey Jones (929)	$ 50.00		
Charles H. Thurber (917)	49.90		
A. F. Nightingale (926)	35.85		
William H. Smiley (927)	19.75		
B. A. Hinsdale (928)	20.25		
J. Remsen Bishop (930)	21.00		
Paul H. Hanus (931)	61.00		
Henry B. Fine (932)	62.76		
George B. Aiton (933)	22.75		
W. H. Butts (934)	14.90		
C. W. Gilbert (935)	40.00		
		398.16	
			870.33
By expenses, Executive Committee:			
E. Oram Lyte, President:			
Traveling (879, 890, 938)	$ 223.46		
Telegrams (938)	39.74		
		$ 263.20	
J. M. Greenwood, Vice-President:			
Traveling (863, 881, 899)	$ 155.13		
Office expense, postage, etc. (863)	26.65		
		181.78	
I. C. McNeill, Treasurer:			
Traveling (860, 891, 924)	$ 112.35		
Office expense, postage, etc. (860, 891, 924)	77.40		
		189.75	
A. G. Lane, chairman Board of Trustees:			
Traveling (882, 900)	$ 113.57		
Telegrams and postage (900)	3.55		
		117.12	
			751.85
By premium on Treasurer's bond (877)			50.00
By expenses, volumes, proceedings, circulars, etc.:			
The University of Chicago, printing 5,500 copies of volume (915, 887)		$ 4,268.41	
Reprints, postage, etc. (916, 937, 940)		252.92	
W. H. McLean, expressage (895)		1,629.75	
United States Express Company (893, 909, 922, 936, 939)		141.34	
J. Ormond Wilson, freight (852, 898)		5.79	
Jones & Kroeger, printing circulars, etc. (921, 892)		322.72	
American Book Company, reports of Committee of Ten (940)		15.90	
			6,634.83
By transfer to permanent funds (878, 894, 897, 943)			10,000.00
By Secretary's office:			
Salary August 1, 1898, to May 1, 1899 (885, 896, 920)		$ 3,000.00	
Office expense (872, 880, 884, 889, 910, 911, 919, 921, 939):			
Postage	$ 462.78		
Telegrams	134.97		
Express and freight	21.53		
Stenographer and clerks	525.45		
Traveling	275.21		
Stationery and miscellaneous	118.44		
		1,538.38	
			4,538.38
Office fixtures for Secretary (910, 911)			144.45
Total			$26,010.92

SUMMARY

By total disbursed as above		$26,010.92
By balance :		
† In Union National Bank of Denver, unavailable	$ 66.19	
Cash in hand, available	2,489.99	
		2,556.18
		$28,567.10

Respectfully submitted,
I. C. MCNEILL,
Treasurer, National Educational Association.

WEST SUPERIOR, WIS., June 27, 1899.

To Board of Trustees, National Educational Association:

I hereby certify that I have personally examined the books of I. C. NcNeill, Treasurer, and have compared them with the orders issued by the chairman of the Board of Trustees, and receipts for bills paid, and find them and this report correct to the best of my knowledge and belief.

(Signed) OSCAR HALVORSEN,
Accountant.

Sworn and subscribed in my presence this 27th day of June, 1899.

(Signed) LEONA PINKHAM,
Notary Public.

† The Union National Bank of Denver declared two dividends of 5 per cent. each, leaving the above balance.

THIRTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES

To the Board of Directors of the National Educational Association:

The Board of Trustees presents the following report of the Permanent Fund of the National Educational Association, and its income, for the year ending June 30, 1899:

Permanent Fund, July 1, 1898:		
Mortgages on real estate	$ 8,000.00	
Kansas school and municipal bonds	32,737.00	
Illinois, Indiana, and Missouri school bonds	20,500.00	
Cash on hand for investment	2,763.00	
		$64,000.00
Cash received from I. C. McNeill, Treasurer, transferred to Permanent Fund from proceeds of the Washington meeting and from income of Permanent Fund		10,000.00
Total in Permanent Fund, July 1, 1899		$74,000.00
In the following items:		
Mortgages on real estate	$21,000.00	
Kansas school and municipal bonds	27,000.00	
Illinois, Indiana, and Missouri school bonds	19,500.00	
Total	$67,500.00	
Cash on hand for investment	6,500.00	
Total		$74,000.00

INVESTMENTS

Investment July 1, 1898		$61,237.00
Bonds paid during the year:		
Clark, No. 42	$ 500.00	
Clark, No. 60	100.00	
Crawford, No. 120	200.00	
Decatur, No. 35	440.00	
Ellis, No. 14	800.00	
Ellis, No. 44	800.00	
Ellis, No. 18	350.00	
Mitchell, No. 106	475.00	
Phillips, No. 63	272.00	
Sheridan, No. 22	100.00	
Smith, No. 109	400.00	
Pratt, No. 39	500.00	
Mitchell, No. 44	500.00	
Ness, No. 41	200.00	
Eudora City, No. 7	100.00	
		6,737.00
		$54,500.00
Investments during the year—real-estate mortgages:		
No. 5136 Hibbard avenue, Chicago	$ 5,000.00	
No. 428 West Adams street, Chicago	8,000.00	
		13,000.00
Total investment July 1, 1899		$67,500.00

INCOME STATEMENT

RECEIPTS

Receipts from interest		$ 3,164.13

DISBURSEMENTS

Paid exchange for coupon collections	$ 10.00	
Paid express charges on bonds	7.45	
Paid rent of box, Merchants' Safe Deposit Co., Chicago	10.00	
Paid attorney's fee — Bentley & Hatfield	50.00	
Total	$ 77.45	
Paid I. C. McNeill, Treasurer	3,086.68	
Total		$ 3,164.13

SCHEDULE OF SECURITIES AND BONDS BELONGING TO THE PERMANENT FUND OF THE NATIONAL EDUCATIONAL ASSOCIATION, JULY 1, 1899

KANSAS SCHOOL BONDS

County	Number of school district	Amount	Rate of interest, per cent.	Interest payable	Bond due	When purchased
Barton	66	$ 330	6	Jan'y and July	January, 1900	February 24, 1893
Cowley	143	360	6	"	July 1, 1901	February 24, 1893
Garfield*	24	800	6	"	January, 1910	February 14, 1890
Greenwood	2	200	6	"	July, 1899	December 23, 1889
Ness	41	200	6	"	July, 1902	February 24, 1893
Ness	70	500	6	"	July, 1903	February 24, 1893
Norton	95	200	6	"	July, 1902	January 30, 1892
Osborne	52	310	6	"	July, 1899	September 20, 1887
Reno	51	1,000	6	"	July, 1902	November 15, 1887
Reno	129	300	6	"	January, 1902	January 30, 1892
Washington*	136	500	6	"	July, 1898	February 24, 1893
		$4,700				

* Interest or principal in default.

KANSAS, COUNTY AND MUNICIPAL BONDS

County	Kind of bond	Bond Nos.	Amount	Rate of interest, per cent.	Interest payable	Bond due	When purchased
Cloud	City of Concordia	35 to 40	$3,000	6	Jan'y and July	July 1, 1918	Sept. 24, 1895
Douglass	Eudora City	8 to 20	1,300	6	March	One due each year March 1	Sept. 1, 1892
Grant*	County	47, 48	2,000	6	Jan'y and July	Feb. 1920	June 1, 1891
Hodgeman	County	1	1,000	6	Jan'y and July	July 1, 1919	Sept. 1, 1892
Kingman	Aid bonds	1 to 7	7,000	6	Jan'y 31 and July	Aug. 31, 1919	Dec. 3, 1894
Lane*	County	11 to 13	3,000	6	Jan'y and July	July, 1918	Oct. 7, 1890
Marion*	City of Marion	1	1,000	5½	Mar. and Sept.	March 1, 1900	Oct. 7, 1890
McPherson	Sharp's Creek Tp.	1	1,000	6	Jan'y and July	Sept. 1, 1916	Dec. 12, 1895
Montgomery	Caney Tp.	1, 2	1.000	6	April and Oct.	Oct. 1, 1916	Dec. 12, 1895
Reno*	City of South Hutchinson	1, 2	1,000	7	Feb. and Aug.	April, 1908	Sept. 1, 1892
Seward*	With Bentley & Hatfield, Wichita, Kan.		1,000		Judgment obtained		March 5, 1890
			$22,300				

* Interest or principal in default.

ILLINOIS, INDIANA, AND MISSOURI SCHOOL BONDS

County	Amount	Rate of interest, per cent.	Interest payable	Bond due	When purchased
Jackson, Kansas City, Mo.	$2,000	5	Jan'y and July	July 1, 1901	May 7, 1896
Noblesville, Ind.	5,000	5	Jan'y and July	July 1, 1900	April 20, 1896
DeKalb, Ill.	3,000	5	April 1	April 1, 1900	April 20, 1896
Cook, Village of Morgan Park, Ill.	3,500	5	March and Sept.	Sept., 1905	Oct. 1, 1894
Lemont, Ill., School Nos. 4, 6, 8, 12, 14, 16, 18, 20, 22, 24, 30, 32	6,000	5	June and Dec.	Issue $16,000, $1000 due each year, June 1	Nov. 18, 1897
	$19,500				
REAL ESTATE					
Providence real estate, first mortgage	$3,000	6	May and Nov. 1		May, 1885
First mortgage, 1919 Wabash ave., Chicago	5,000	5	May and Nov. 1	May 1, 1903	May 1, 1898
First mortgage, 5136 Hibbard ave., Chicago	5,000	5	May and Nov. 1	Nov. 1, 1903	Oct. 31, 1898
First mortgage, 428 W. Adams st., Chicago	8,000	6	Mar. and Sept. 15	March 15, 1904	March 15, 1899
	$21,000				

RECAPITULATION

Mortgages on real estate	$21,000
Kansas school and municipal bonds	27,000
Illinois, Indiana, and Missouri school bonds	19,500
Cash on hand for investment	6,500
Total Permanent Fund	$74,000

Respectfully submitted,

ALBERT G. LANE, *Chairman*,
NICHOLAS MURRAY BUTLER,
F. LOUIS SOLDAN,
E. ORAM LYTE,
Trustees.

The foregoing securities were examined at the Merchants' Safety Deposit Vaults, Chicago, September 11, 1899, and I certify that the thirteenth annual report of the Board of Trustees is a correct statement of the investments belonging to the Permanent Fund of the National Educational Association in the custody of A. G. Lane, chairman of the Board of Trustees.

(Signed) L. D. HARVEY.

JOURNAL OF PROCEEDINGS

OF THE

THIRTY-EIGHTH ANNUAL MEETING

OF THE

NATIONAL EDUCATIONAL ASSOCIATION

LOS ANGELES, CAL., JULY 11–14, 1899

FIRST DAY'S PROCEEDINGS

OPENING SESSION. — TUESDAY, JULY 11, 3 P. M.

The association met in Hazard's Pavilion, and was called to order by Hon. F. Q. Story, chairman of the Local Executive Committee, Los Angeles.

Invocation by Rev. Charles Clark Pierce, of Memorial Baptist Church.

Music — "N. E. A. March," *Mackenzie* (composed by a Los Angeles high-school student) — rendered by the Woman's Orchestra, under the direction of Mr. Harley Hamilton.

Addresses of welcome were made by Hon. Henry T. Gage, governor of California, on behalf of the state; Hon. Thomas J. Kirk, state superintendent of public instruction, on behalf of the educational interests of the state; Professor Elmer E. Brown, University of California, state director, on behalf of the state management; Hon. Fred Eaton, mayor of Los Angeles, on behalf of the municipality; and J. A. Foshay, superintendent of schools, Los Angeles, on behalf of the educational interests of the city.

The conduct of the meeting was then transferred to Dr. E. Oram Lyte, President of the National Educational Association.

Responses to the addresses of welcome were made by N. C. Dougherty, superintendent of schools, Peoria, Ill.; Emerson E. White, Columbus, O.; and J. H. Phillips, superintendent of schools, Birmingham, Ala.

John Swett, of California, was then introduced, and spoke as a representative of national educational interests, both past and present.

Music — Overture, "Don Juan," *Mozart* — by the Woman's Orchestra.

President E. Oram Lyte delivered the annual presidential address.

The President then announced the following Committee on Resolutions:

Nicholas Murray Butler, New York, *chairman*.

N. C. Dougherty, Illinois.	John S. Locke, Maine.
R. B. Fulton, Mississippi.	William E. Wilson, Washington.
Joseph Swain, Indiana.	W. H. Bartholomew, Kentucky.

Music — Paraphrase of Melody in F, *Rubinstein* — by the Woman's Orchestra.

Adjourned.

SECOND SESSION. — TUESDAY, JULY 11, 8 P. M.

The meeting was called to order in Hazard's Pavilion by President Lyte.

Music by the Aoedean Club, under the direction of Mrs. Gertrude B. Parsons.

Dr. W. T. Harris, United States Commissioner of Education, delivered an address on "An Educational Policy for Our New Possessions."

Music by the Aoedean Club.

Henry S. Townsend, inspector general of schools, Hawaii, addressed the association on the subject, "The Educational Problem in Hawaii."

The meeting then adjourned.

SECOND DAY'S PROCEEDINGS

THIRD SESSION. — WEDNESDAY, JULY 12, 9:30 A. M.

The association met in Hazard's Pavilion, President Lyte in the chair.

Prayer was offered by Rev. Romaine S. Cantine, D.D., pastor of the First Methodist Church.

Music — "Spring Song," *Henschel* — by Miss Eisenmayer, of Los Angeles.

L. D. Harvey, state superintendent of public instruction, Wisconsin, delivered an address on "Fundamentals in Teaching."

Mrs. Helen Grenfell, state superintendent of public instruction, Colorado, read an address on the subject, "*Quo Vadimus?*"

Superintendent J. H. Hinemon, of Arkansas, was introduced as the authorized representative of the Southern Educational Association. He invited the members of the National Educational Association to unite with the teachers of the South in their next convention at Memphis, Tenn.

Superintendent Frank Rigler, Portland, Ore., addressed the association on "The Average Scholarship of the Average Pupil."

Miss Canady, of Los Angeles, rendered a violin solo.

Will S. Monroe, State Normal School, Westfield, Mass., spoke on "Fatigue among School Children."

The Committee on Nominations, appointed by President Lyte in accordance with sec. 1 of the By-Laws, was announced by the Secretary, as follows:

COMMITTEE ON NOMINATIONS

AARON GOVE, *chairman.*

North Atlantic Division

Maine	John S. Locke	Rhode Island	Horace S. Tarbell
New Hampshire	Channing Folsom	Connecticut	E. N. Kendall
Vermont	W. O. Wheeler	New York	A. S. Downing
Massachusetts	Charles H. Keyes	New Jersey	J. H. Hulsart

South Atlantic Division

Pennsylvania	George Howell	West Virginia	J. R. Trotter
Delaware	A. H. Berlin	North Carolina	G. A. Grimslee
Maryland	W. H. Shelley	South Carolina	F. Q. O'Neal
District of Columbia	W. B. Powell	Florida	William N. Sheats
Virginia	E. C. Glass		

South Central Division

Kentucky	McHenry Rhoads	Louisiana	Warren Easton
Tennessee	M. M. Ross	Texas	G. T. Winston
Georgia	W. F. Slaton	Oklahoma	S. N. Hopkins
Alabama	James K. Powers	Arkansas	George B. Cook
Mississippi	R. B. Fulton	Indian Territory	L. W. Williams

North Central Division

Ohio	John A. Heizer	Minnesota	F. V. Hubbard
Indiana	Robert A. Ogg	Missouri	F. B. Tharpe
Illinois	Alfred Bayliss	North Dakota	J. G. Halland
Michigan	D. W. Springer	South Dakota	Miss Ada F. Hatch
Wisconsin	William George Bruce	Nebraska	J. W. Dinsmore
Iowa	H. E. Kratz	Kansas	J. W. Spindler

Western Division

Montana.....J. P. Hendricks	Nevada.....Thomas F. Brown
Wyoming.....Miss Estelle Reel	Idaho..... Miss Doris McMasters
Colorado.....Aaron Gove	Washington.....R. S. Bingham
New Mexico.....C. M. Light	Oregon.....Frank Rigler
Arizona.....F. A. Cooley	California.....J. W. McClymonds
Utah.....J. M. Tanner	

The meeting then adjourned.

FOURTH SESSION.—WEDNESDAY, JULY 12, 8 P. M.

The association was called to order by President Lyte.

Music—"Thorough Brier," *Tonnah*—by Mrs. Grace Miltimore Stivers, Miss Abbie Gilman, Mr. J. P. Dupuy, and Mr. D. H. Morrison.

An address on "The United States Exhibit at Paris" was delivered by Howard J. Rogers, director of education and social economy, United States commission to the Paris exposition.

Music by the quartet.

Dr. Elmer E. Brown, University of California, Berkeley, addressed the association on "Art in Education."

Adjourned.

THIRD DAY'S PROCEEDINGS

FIFTH SESSION.—THURSDAY, JULY 13, 9:30 A. M.

HAZARD'S PAVILION

The meeting was called to order by Vice-President R. S. Bingham, superintendent of schools, Tacoma, Wash.

Prayer was offered by Dr. Nathan C. Schaeffer, of Pennsylvania.

Music by the Queen Vocal Quartet.

An address on "The Religious Element in the Formation of Character" was given by Rt. Rev. George Montgomery, bishop of Los Angeles.

Professor G. W. A. Luckey, University of Nebraska, spoke on "The Development of Moral Character."

"Evolution and Ethics" was the subject of an address by Sidney T. Skidmore, City Normal School, Philadelphia, Pa.

R. H. Webster, superintendent of schools, San Francisco, Cal., addressed the association on "The Scholar and the State."

Adjourned.

SIMPSON TABERNACLE

Vice-President E. B. McElroy, of the University of Oregon, presided.

Rev. Warren F. Day, D.D., pastor of the First Congregational Church, offered prayer.

Vocal solo by Mr. D. H. Morrison.

President R. B. Fulton, University of Mississippi, addressed the meeting on "Growth of Confidence between High Schools and Colleges."

Mrs. Josephine Heermans, Kansas City, Mo., read a paper on "The Spirit of the Classics."

Vocal solo—"Ninon," *Tosti*—by Mrs. Florence F. Bruce.

Frank J. Barnard, superintendent of schools, Seattle, Wash., spoke on the subject, "Let Pupils be so Classified as to Allow Unrestricted Progress or Unlimited Time, According to Ability."

This paper was discussed by J. W. McClymonds, superintendent of schools, Oakland, Cal.

The meeting then adjourned.

MINUTES OF THE ANNUAL BUSINESS MEETING OF THE ACTIVE MEMBERS

HAZARD'S PAVILION, THURSDAY, JULY 13, 12:20 P. M.

The annual meeting of the active members of the National Educational Association was called to order by President Lyte.

PRESIDENT LYTE: The first order of business is a communication from the Board of Directors.

Secretary Shepard read the communication, as follows:

"The Board of Directors, at its annual meeting held on Tuesday, July 11, passed a resolution recommending to the active members that the following amendment be made to By-Law No. 1:

"That the last sentence which reads, 'The meeting of active members to nominate members of the nominating committee shall be held at 2 P. M. on the second day of the meeting, at such place as shall be announced in the general program,' be amended by striking out the phrase 'at 2 P. M on the second day of the meeting,' and inserting 'at 5:30 P. M. on the first day of the meeting.'"

PRESIDENT LYTE: The Secretary will be kind enough to explain briefly the object of this change, so that the members may vote intelligently.

SECRETARY SHEPARD: The by-law which it is proposed to amend provides that the President shall, at the third session of each annual meeting, appoint a committee on nominations consisting of one member from each state. It also provides that the active members of the several states shall meet at 2 P. M. on the second day to nominate to the President members of the general nominating committee. Under the arrangements this year, by which the first session was held at 2 P. M., you will clearly see that the session at which the President is ordered to appoint the nominating committee was held before 2 P. M. on the second day of the meeting, and therefore the operation of the by-law would be impossible. It was, therefore, necessary to make an arbitrary change in order to carry out the purpose of the by-law by setting the meeting for the active members at 5:20 P. M. on the afternoon of the first day, in order that such meeting should be held before the President, by the terms of the by-law, should appoint the nominating committee. The change proposed brings the different parts of the by-law into harmony and makes it possible to observe them all.

DR. E. E. WHITE, of Ohio: I move that the amendment proposed by the Board of Directors be adopted.

The motion was duly seconded.

MR. WEBER, of Tennessee: The by-law provides that there shall be a member of the nominating committee from each state, but in fact we have a member of that committee named from each state and territory.

SECRETARY SHEPARD: The by-law reads "from each state." It does not read "from each state and territory;" but I believe every territory has been by custom represented as well as every state.

The President put the question of the adoption of the amendment proposed by the Board of Directors, and the same was carried unanimously.

MR. WEBER, of Tennessee: Do I understand the word "territory" is inserted?

PRESIDENT LYTE: The word "territory" is not inserted.

MR. BINGHAM, of Washington: I move that the word "territory" be inserted, so that the by-law shall read "one member from each state and territory."

The motion was duly seconded and carried.

PRESIDENT LYTE: Is it the wish of the association that the report of the Treasurer be read? It is a very interesting report. Has the report been circulated among the members?

MR. GREENWOOD, of Kansas City, Mo.: It has, and the members are in possession of the report.

MR. COY, of Ohio: I think we should hardly be rendered familiar enough with this report by simply having it read. We need to have it in our hands. Therefore I move that the reading of this report be dispensed with.

The motion was duly seconded and carried.

E. O. VAILE, of Chicago, Ill.: I make a motion, in which I am sure all will concur, that we pass a vote of thanks to our retiring Treasurer for his long and valuable services to this association.

The motion was seconded by various members and carried unanimously by a rising vote.

PRESIDENT LYTE: The next order of business is the report of the Board of Trustees, by the chairman.

CHAIRMAN A. G. LANE of the Board of Trustees: The printed report is being distributed to the members. There is nothing new in the situation compared with the report made last year. I shall be very glad to answer any questions that any member of the association may wish to ask with reference to it.

PRESIDENT LYTE: You have heard the remarks of Chairman Lane of the Board of Trustees. This report is also very interesting, and we are all glad to have the opportunity to look thoroly into the financial management of the association. I myself have examined the reports of the Treasurer and of the Board of Trustees with a good deal of care, and find that every cent of the money of the association is fully accounted for.

L. E. WOLF, of Kansas: A year ago, when the report was made, the interest on some of the invested funds was in default. I think it might be well to give Chairman Lane an opportunity to explain the condition of those funds now.

CHAIRMAN LANE: There has been no change in the amount of bonds that were in default of interest since the last report. Quite a number of them have been paid. The total amount which is in default of interest is $9,300; but many of these represent school districts where there have been changes of officers. In the changes of officers they have neglected to provide for the payment of interest on the bonds of the district. We have been able to make collections on quite a number of the bonds that were in default of interest. Recently we received payment on some bonds that have been in default three years. The fiscal agency at New York failed to follow up those cases, and we found it necessary to go to the district officers to reach them. In conferring with those who are familiar with the situation in Kansas we find that there is more doubt about the bonds known as the "Grant county bonds" and the "Lane county bonds." The Board of Trustees accepted a compromise in the case of the city of South Hutchinson. We have a thousand-dollar bond issued by that city. The city of South Hutchinson was organized some years ago. Soon disasters befell their schoolhouses and public buildings. The result was that they moved quite a number of buildings over into Hutchinson; and I am informed, and observed as I passed thru there, that all that is left of the city of South Hutchinson is three or four salt plants, a few railroad tracks leading to them, and a few scattered houses. The information we received was such that we voted to accept a compromise of fifty cents on the dollar on that bond. In the case of the Seward county bond we obtained a judgment a year ago, and it has resulted in a compromise on the rate of interest, and a provision by which they have agreed to levy an annual tax to provide for the retirement of a certain portion of the total indebtedness. So that I think we shall get the full amount of the principal in the case of the Seward county bond. In the case of the Lane county bonds suit has been instituted on about thirty thousand dollars' worth of those bonds. We did not join in the suit, but ultimately we will join in it. Our interests are being looked after carefully. From the best estimate that I can make, and from reliable information obtained,

I do not think there is likely to be any very considerable loss of the principal fund. In some of the counties in the remote western part of the state, where villages were organized and schoolhouses built, the people have moved away, and there is not much left excepting the schoolhouses, with no one to pay the interest on the bonds. We may find that it will be some years before we shall be able to collect the principal. In the meantime compromises have been made on a very low rate of interest, with the hope that we may keep the bonds good until such time as they will be able to pay them. These investments were all made some years ago, after the Topeka meeting in 1886, and the subsequent meeting at Chicago in 1887, when there was quite a large sum of money to be invested. No member of the present Board of Trustees was a trustee at that time; but we have every reason to believe that those who were trustees used what they considered due care in these investments. They were advised by the Kansas school people at the time that these bonds were substantial securities. That was before the panic of 1893. Since that time there has been such a continued failure of crops that these western counties have defaulted. I believe that covers substantially all that can be said. I will simply say in reference to the recent investments, which you will see noted on another page of the report, that they have been made with great care, at a lower rate of interest —5 per cent.— where the land alone, without the buildings, is equal in value to the amount of the loan. The Board of Trustees is exercising the utmost care to see that every new loan is made on a conservative basis and without incurring any risk. I shall be glad to answer any other questions that may be asked.

On motion of W. A. Bell, of Indiana, the report was adopted without dissent.

PRESIDENT LYTE: Before calling for the report of the Committee on Nominations, is there any other miscellaneous business to be presented?

DR. NICHOLAS MURRAY BUTLER, of New York: I wish to offer for the consideration of the active members the following resolution, which was passed at the meeting of the Board of Directors on Tuesday, and at the suggestion of my friend, Dr. White, of Ohio, is again offered here:

Resolved, That the President of the National Educational Association be requested to send the following telegram of congratulation on behalf of the association to the American delegates to the peace conference now in session at The Hague:

"ANDREW D. WHITE,

Chairman American Delegation to Peace Conference, The Hague, Holland:

"The National Educational Association, in convention assembled, tenders American delegation to peace conference heartiest congratulations on success which has attended their noble efforts in behalf of principle of arbitration."

I move the adoption of the resolution.

The resolution was duly seconded and unanimously adopted.

PRESIDENT LYTE: Is there any other business to be brought before the association before calling for the report of the Committee on Nominations, which will be the last order of business for the morning? The chair hears none. It is then in order to call for the report of the Committee on Nominations. Is the committee ready to report?

Superintendent Gove, of Colorado, chairman of the Committee on Nominations, read the following

REPORT OF THE COMMITTEE ON NOMINATIONS

The Committee on Nominations, pursuant to call, met in the Directors' Room, Board of Trade Building, and was called to order at 4 P. M., July 12, by the chairman, Aaron Gove.

On motion, A. S. Downing, of New York, was made secretary of the committee.

Upon motion, nominations were made for the office of President. John A. Heizer, of Ohio, placed in nomination O. T. Corson, of Columbus, O.; Mr. Bruce, of Wisconsin, and Mr. Powers, of Alabama, seconded the nomination. By unanimous vote Mr. Corson was nominated as President.

Upon motion, the following were chosen by ballot as Vice-Presidents:

First Vice-President	E. ORAM LYTE	Pennsylvania
Second Vice-President	J. A. FOSHAY	California
Third Vice-President	H. M. SLAUSON	Michigan
Fourth Vice-President	E. B. MCELROY	Oregon
Fifth Vice-President	J. P. HENDRICKS	Montana
Sixth Vice-President	J. M. GREEN	New Jersey
Seventh Vice-President	W. H. BARTHOLOMEW	Kentucky
Eighth Vice-President	W. A. BELL	Ohio
Ninth Vice-President	W. F. SLATON	Georgia
Tenth Vice-President	L. W. BUCHHOLZ	Florida
Eleventh Vice-President	MRS. GASTON BOYD	Kansas
Twelfth Vice-President	GEORGE H. CONLEY	Massachusetts

Upon motion, the committee proceeded to ballot for a nominee for the position of Treasurer, and the result of such ballot was the nomination of C. G. Pearse, of Omaha.

The following persons were nominated as directors for the ensuing year:

North Atlantic Division

Maine — JOHN S. LOCKE	Rhode Island — GEORGE E. CHURCH
New Hampshire — CHANNING FOLSOM	Connecticut — E. N. KENDALL
Vermont — MASON S. STONE	New York — AUGUSTUS S. DOWNING
Massachusetts — WILL S. MONROE	New Jersey — H. BREWSTER WILLIS

South Atlantic Division

Pennsylvania — H. W. FISHER	West Virginia — J. N. DEAHL
Delaware — A. H. BERLIN	North Carolina — E. A. ALDERMAN
Maryland — E. B. PRETTYMAN	South Carolina — F. C. WOODWARD
District of Columbia — W. B. POWELL	Florida — W. N. SHEATS
Virginia — E. C. GLASS	

South Central Division

Kentucky — MCHENRY RHOADS	Louisiana — WARREN EASTON
Tennessee — H. C. WEBER	Texas — ALEXANDER HOGG
Georgia — WILLIAM M. SLATON	Oklahoma — D. R. BOYD
Alabama — J. H. PHILLIPS	Arkansas — J. R. RIGHTSELL
Mississippi — R. B. FULTON	Indian Territory — C. W. GOODMAN

North Central Division

Ohio — J. A. SHAWAN	Minnesota — F. V. HUBBARD
Indiana — J. W. CARR	Missouri — W. T. CARRINGTON
Illinois — J. H. COLLINS	North Dakota — W. S. HOOVER
Michigan — D. W. SPRINGER	South Dakota — FRANK CRANE
Wisconsin — L. D. HARVEY	Nebraska — J. H. MILLER
Iowa — W. M. BEARDSHEAR	Kansas — FRANK R. DYER

Western Division

Montana — SAMUEL D. LARGENT	Nevada — J. E. STUBBS
Wyoming — ESTELLE REEL	Idaho — J. W. DANIELS
Colorado — L. C. GREENLEE	Washington — O. C. WHITNEY
New Mexico — ELIZABETH JACKSON	Oregon — E. D RESSLER
Arizona — F. A. COOLEY	California — JOHN SWETT
Utah — F. B. COOPER	

On motion, it was ordered that the chairman be permitted to fill the vacancy in nomination for the directorship of any state upon request of the member of the nominating committee representing such state, provided such request were made prior to the report of this committee.

(Signed) AUGUSTUS S. DOWNING,
Secretary.

MR. BARNARD, of Seattle, Wash.: I wish to ask whether anyone is named as director for Hawaii.

CHAIRMAN GOVE: Your committee was not authorized to nominate a director for Hawaii, because it is not even a territory, and there are no provisions for colonies.

MR. BARNARD: I wish to say that I am emphatically a believer in expansion, and believe that expansion should be followed in the matter of directors. I move, if it is in order, that the report of the committee be amended by adding the name of Professor M. M. Scott, of Honolulu, to the list of directors, as director for Hawaii.

DR. E. E. WHITE, of Ohio: I like expansion — in order. Our constitution and by-laws determine who shall constitute the Board of Directors. As you are aware, Congress has taken no action as yet on the report organizing a government for Hawaii, and I think under our constitution we could not fill that place until a government is authorized by Congress and the status of Hawaii determined. Let us wait a year, and then we can expand intelligently.

PRESIDENT LYTE: Evidently the motion of Mr. Barnard is not in order.

DR. WHITE: Mr. President, I move that the report of the Committee on Nominations be accepted and approved, and that the Secretary be authorized to cast the ballot of the active members electing the persons named as officers of the association for the ensuing year.

The motion was seconded and carried unanimously. The Secretary cast the ballot, and the President declared the persons named by the nominating committee duly elected to the respective offices for which they were named.

PRESIDENT LYTE: With a modesty becoming to Ohio, I think the newly elected President has hidden himself away. The chair appoints Dr. White to find him and conduct him to the platform.

DR. WHITE: Mr. President, an Ohio man is easily found when wanted to fill an office (conducting the President-elect to the platform).

PRESIDENT LYTE: Ladies and gentlemen, I have great pleasure in presenting to you a representative of the Buckeye State, large in body and large in heart. I take pleasure in introducing your newly elected President, Hon. O. T. Corson, of Ohio.

O. T. CORSON: *Mr. Chairman, and Members of the Association:* I have no desire so early in my official career to show my absolute unfitness for the office to which you have elected me by attempting to make a speech. I therefore have nothing further to say at this moment, except to thank you for the courtesy of your call, and to pledge you my highest endeavor, with your aid, to further as best we may the important work of this great association.

On motion, the meeting adjourned.

IRWIN SHEPARD,
Secretary.

E. ORAM LYTE,
President.

SIXTH SESSION.—THURSDAY, JULY 13, 8 P. M.

The meeting was called to order in Hazard's Pavilion by President Lyte.

Music by the St. Cecilia Quartet.

An address on "The Outlook in Education" was delivered by Dr. Nicholas Murray Butler, Columbia University, New York, N. Y.

Music by the St. Cecilia Quartet.

An address on "Progress in Public Education" was delivered by F. Louis Soldan, superintendent of schools, St. Louis, Mo.

Adjourned.

FOURTH DAY'S PROCEEDINGS

SEVENTH SESSION.— FRIDAY, JULY 14, 9:30 A. M.

The association met in Hazard's Pavilion, Vice-President Greenwood in the chair.

Rev. A. C. Smithers, pastor of the First Christian Church, offered prayer.

Music by the choir of the Temple Bnai-Brith.

Aaron Gove, superintendent of schools, Denver, Colo., gave an address on "Usurpation of Home by School."

Music — duet — by Mrs. Haralson and Mrs. Scarborough.

E. A. Bryan, president of State Agricultural College, Pullman, Wash., read an address on "The Economic Interpretation of History."

E. E. White, of Ohio, submitted the report of the Committee on Necrology, and moved that the report be accepted and the sketches included in the report be printed in the proceedings. Seconded and carried.

John MacDonald, editor of *Western School Journal* and president of the Educational Press Association, addressed the association on "Educational Journalism — Its Tribulations and Triumphs."

George P. Brown, editor of *School and Home Education*, Bloomington, Ill., asked to have his paper on "The Function of Educational Journalism" printed in the annual volume without being read. By common consent the request was granted.

"Is the Educational Press Educational?" was the subject of an address by William George Bruce, editor of *American School Board Journal*, Milwaukee, Wis.

Ossian H. Lang, editor of *The School Journal*, New York city, spoke on "Ideal and Practical Considerations in Educational Journalism."

Adjournment.

EIGHTH SESSION.—FRIDAY, JULY 14, 8 P. M.

The association met in Hazard's Pavilion, President Lyte presiding.

Music—"O, Every Joy on Earth is Mine," *Schnecker*—by the Immanuel Church choir.

David Starr Jordan, president of Leland Stanford Jr. University, delivered an address on "The Usefulness of the University."

Music — selections from "Robin Hood"—by the Immanuel Church choir.

An address on "The School in Relation to the Higher Life" was given by Nathan C. Schaeffer, state superintendent of Pennsylvania.

An address on "Professional Sentiment" was given by A. E. Winship, editor of *Journal of Education*, Boston, Mass.

Dr. Nicholas Murray Butler, as chairman, read the report of the Committee on Resolutions, which was unanimously adopted, as follows:

REPORT OF COMMITTEE ON RESOLUTIONS

The National Educational Association, assembled in its thirty-eighth annual convention and representing in the largest sense the teachers of the United States, makes the following declaration of principles:

We reaffirm our belief that the course of education, despite difficulties, doubts, and discouragements, is steadily upward and onward. The year which has passed has been one of genuine progress. Sound educational ideals are more firmly established, the benefits of school and college education are more widely diffused, the work of teaching is more intelligent and successful, the teachers themselves constantly grow more earnest and more studious. The one dark page in the history of the year is that which records interference with the work of public education and attacks, successful and unsuccessful, made upon it by political traders and spoils-seekers. We appeal to the public and to the press to resist, to resent, and to punish these attacks, and we pledge our best efforts to the absolutely non-political and non-sectarian conduct of the work intrusted to us.

We record with gratitude our sense of obligation to those noble men and women who have held out a generous hand to education north, south, east, and west, and who, by their gifts and endowments, have added so much to the strengthening and upbuilding of the various types of educational institutions, general and special, elementary and higher, thruout the land. The influence of their example is widespread, and the effectiveness of their gifts is incalculable.

We emphasize once more the function of the school, as a community center, to draw to itself the children and the parents for gatherings which reflect the life of the people and which give it inspiration. Particularly, in close association with the library, the school should make itself felt in shaping the thought of the people in ways and by methods which lie outside of the scope of formal instruction.

We support cordially every effort to elevate the profession of teaching by raising the standards for entrance to it, by promoting educational scholarship, and by providing for stability of tenure, and for adequate compensation. We are prepared to accept the complementary principle that inefficient and incompetent teachers must yield to the professional judgment which asks their retirement, and we deplore any and every attempt, organized or other, to protect such teachers in their posts by influence, whether personal or political.

We wish by every legitimate means to aid the invaluable work of the Bureau of Education, and we ask that it be given such support by Congress as will enable it to perform, with fullest efficiency, the tasks intrusted to it. We recognize, perhaps more fully than do others, the value of the statistics of education collected in the census of 1890, and we earnestly urge upon the director of the forthcoming census the desirability of carrying on anew the lines of inquiry then pursued, together with such additions and improvements as experience has shown to be needed.

This association has long insisted, and continues to insist, upon the full recognition of all educational agencies as essentially undertakings in the public interest, whether they are supported by public taxation or by other means. All alike are and should be in heartiest co-operation, and any attempt to array one institution, or one form of educational effort, against another is little short of treason to the nation's highest interests.

The past year has brought new and grave responsibilities to our common country, and has opened before it new and difficult opportunities. With a courage born of high hope and of confidence in democracy, the nation's schools and schoolmasters will assume their full share of the burden so suddenly imposed upon our citizenship, and will contribute by every means in their power to the wise, patriotic, and democratic solution of the problems which confront us as a people.

NICHOLAS MURRAY BUTLER, of New York, *Chairman*,
NEWTON C. DOUGHERTY, of Illinois,
ROBERT B. FULTON, of Mississippi,
JOSEPH SWAIN, of Indiana,
JOHN S. LOCKE, of Maine,
WILLIAM E. WILSON, of Washington,
W. H. BARTHOLOMEW, of Kentucky,
Committee on Resolutions.

RESOLUTIONS OF THANKS

The following resolutions were offered by Dr. Butler, on behalf of the Committee on Resolutions, and, upon motion, were unanimously adopted:

Resolved, That the National Educational Association hereby tenders cordial and hearty thanks to those individuals, committees, and other agencies which have united to make the meeting at Los Angeles unsurpassed in comfort, in interest, and in size. In particular may be mentioned our obligations to F. Q. Story, Esq., chairman, and his associates upon the Local Executive Committee; to Superintendent J. A. Foshay, and the principals and teachers who have so warmly and so generously seconded his efforts for our entertainment and welfare; and to all who have co-operated with them.

To the citizens of Los Angeles for their sincere and heartfelt welcome; to the press for its unusually full and accurate reports of all our gatherings; to the various transportation companies for their generous co-operation in perfecting the plans for the meeting; and to Messrs. Wyckoff, Seamans & Benedict, proprietors of the Remington typewriter, and to their efficient representative, Miss Orr, for typewriter service freely placed at the disposal of the association and its officers, we are under obligations which will not be forgotten while the memories of this great meeting themselves last.

Dr. Butler then, on behalf of the Committee on Resolutions, offered the following resolution, which was, upon vote put by the Secretary, unanimously adopted:

Resolved, That to the retiring President, Dr. E. Oram Lyte, of Pennsylvania, and to the retiring Treasurer, Mr. I. C. McNeill, of Wisconsin, we make expression of our high personal regard and of our sincere appreciation of the ability, devotion, and unselfishness with which they have served the association.

PRESIDENT LYTE: It becomes my duty as the retiring President of the association to introduce the newly elected President to you and to transfer to him the emblem of my authority. Before doing so, let me return my personal thanks to the members of the association, and particularly to the Secretary, for the kindness uniformly shown to me during the year. The resolutions adopted by this body express somewhat of the feelings of all the visiting members of the association with respect to our reception by Los Angeles and California, but words utterly fail to tell fully how delighted we have been with the cordiality with which we were met as we descended upon this city from the Rockies, from the great middle West, from the Atlantic's rock-bound coast, from the St. Lawrence, and from the Rio Grande. I am sure that you do not fully realize how kind you have been to us and how much you have aided in making this meeting a success. The memory of this visit to your charming city, of your sunshine and perfect weather, of your fruits and flowers, of your open-hearted, refined, cultured hospitality, will remain with us as a delightful recollection long after this beautiful south-land has passed from our vision. It will not be uninteresting for you all to know that the enrollment at this meeting is the largest in the history of this association, and that every one of the multitude which has crossed the borders of this golden state has fallen in love with it. I can only wish that the influence of this meeting for good may be as deep as the memory of its pleasures, and that the good people of Los Angeles and vicinity will think of us in days to come with somewhat of the same pleasure with which we shall think of them.

I now take pleasure in transferring to my successor in office the guidance of this body of educators, the greatest and most influential educational association in the world. I am sure that under the leadership of my distinguished friend from Ohio this organization will make rapid strides onward in the great work in which it is engaged. Permit me to introduce to you your newly elected President, Hon. O. T. Corson, of Ohio, to whom I now surrender the gavel.

PRESIDENT O. T. CORSON:

Mr. Chairman, Members of the National Educational Association, Ladies and Gentlemen:

In expressing to you my grateful appreciation of the honor which comes to me with this introduction, I am not unmindful of the fact that along with that honor come grave responsibilities — responsibilities that I would neither care nor dare to assume if I did not have an abiding faith in the unswerving loyalty of the membership of this great association to its highest and best interests — a loyalty which I know is a positive guaranty that you will extend to the incoming administration that helpful sympathy and cordial co-operation without which failure is inevitable, and with which success may be possible. I thank you for the confidence you have reposed in me, and beg you to give to us your co-operation, so that this great association may continue its great work.

I feel, Mr. President, at this moment that there is but one appropriate thing for me to do, and that is to return to you this emblem of power, that you may close this association, over which you have presided with such honor, such dignity, and such satisfaction. I beg to assure you, sir, that along with this return go the best wishes of the teachers of the United States; and along with this return go also our congratulations upon the great success of this great meeting.

After the singing of "America" by the audience, the benediction was pronounced by Dr. Nathan C. Schaeffer, of Pennsylvania, and the meeting was adjourned by President Lyte.

IRWIN SHEPARD,
Secretary.

E. ORAM LYTE,
President.

MINUTES OF THE BOARD OF DIRECTORS FOR 1898–99

CHAMBER OF COMMERCE, LOS ANGELES, CAL.—TUESDAY, JULY 11, 12 M.

The Board of Directors of the National Educational Association met in the Directors' Room of the Chamber of Commerce, and was called to order by President E. Oram Lyte.

The following directors were present:

E. Oram Lyte, Pennsylvania; I. C. McNeill, Wisconsin; Nicholas Murray Butler, New York; Aaron Gove, Colorado; J. M. Greenwood, Missouri; Albert G. Lane, Illinois; F. Louis Soldan, Missouri; A. R. Taylor, Kansas; E. E. White, Ohio; Will S. Monroe, Massachusetts; W. B. Powell, District of Columbia; W. H. Bartholomew, Kentucky; J. L. Holloway, Arkansas; L. D. Harvey, Wisconsin; Miss Estelle Reel, Wyoming; L. C. Greenlee, Colorado; Mrs. E. R. Jackson, New Mexico; F. S. Hafford, Arizona; O. C. Whitney, Washington; Elmer E. Brown, California; Irwin Shepard, Minnesota.

Director Gove moved that the reading of the minutes of the last meeting be dispensed with, and the minutes be approved as printed in the Washington volume, with a correction inserting record of the action of the board at its last meeting appropriating $75 for the expenses of the Committee on Forms of Reports for School Statistics. Seconded and carried.

The resignation of Director Gastman, of Illinois, was read, and upon motion was accepted. The informal resignation of Director Kirk, of Missouri, was read, and upon motion accepted, and W. G. Carrington was elected to fill the vacancy. Director Gove moved that the resignation of Director Bass, of Mississippi, be accepted, and that R. B. Fulton, of that state, be elected director in his stead. Carried.

Treasurer I. C. McNeill presented his annual report.

Director Butler called attention to the increased revenue of the association thru the office of permanent Secretary.

The Secretary reported that two of the terminal lines at Washington, D. C., had not yet closed their accounts for last year, and that an additional $1,000 could be expected from that source.

Director Bartholomew moved that the Treasurer's report be accepted and ordered printed in the minutes. Seconded.

Chairman of the Board of Trustees, A. G. Lane, stated that the report of the Treasurer had been examined by the trustees and found to be correct.

Director Bartholomew's motion was then carried

Director Lane, chairman of the Board of Trustees, presented the report of the Board of Trustees, explaining the various items in effect as follows:

Altho there has been default in the payment of interest on $9,300 of Kansas bonds, upon careful investigation, in which we have been greatly aided by J. N. Wilkinson, of Emporia, Kan., we are convinced that the final loss on the principal will not be very great.

The Board of Trustees has voted to accept a proposition to receive 50 per cent. of the amount due from the city of South Hutchinson, its bond being for $1,000. South Hutchinson is a disorganized city. Business houses have been removed, and it is impossible, under the existing laws, to raise revenue enough to pay the interest on the bond. The board also reports that judgment has been obtained against Seward county for interest on a bond of $1,000, and has voted to accept a compromise on the past interest due and on the rate of interest, on condition that an annual levy be made to retire a part of the principal. It is believed that the full amount of the principal of the Seward county bond will be obtained.

The Grant county bonds, amounting to $2,000, and the Lane county bonds, amounting to $3,000, are in default in payment of interest, and suit will probably be necessary to secure payment.

On motion of Mr. Gove, of Denver, the report of the Board of Trustees was approved, and ordered printed in the volume of proceedings.

At the suggestion of Director Butler, it was ordered that the statement of the compromises in cases of defaulting bonds, as made by Mr. Lane, be inserted in the minutes.

Director Fulton suggested that the date of purchase of each bond be entered in the report. The suggestion was accepted without dissent.

Director Greenwood moved that the report of the trustees be received and approved, and printed in the next annual volume.

Pending action, Director Lane reported that Director L. D. Harvey, of Madison, Wis., had been appointed as auditor to examine all of the securities held by the association, and that he would make his report later.

Director Gove called attention to the obligation which was due to the Board of Trustees by the association for its careful management of the financial matters of the association.

Director White, of Ohio, suggested that the motion of Director Greenwood be changed by inserting the words "subject to the approval of the auditor." The suggestion was accepted by Director Greenwood, and the motion, as so modified, was duly carried.

L. S. Thompson, of New Jersey, by permission, addressed the board concerning the Committee on Course of Study in Art Education, which had been appointed at Washington by the Art Department, and asked that an appropriation be granted to enable it to complete its work. Upon request, the Secretary read the resolution passed by the board at its last meeting concerning the reference of applications for appropriations to the Council. Director Gove moved that the proposition be put into written form and referred to the Council for recommendation. Carried.

Director Lane offered the following:

Resolved, That the President of the National Educational Association is hereby instructed to convey the thanks of the directory of the association to the Central Woman's Christian Temperance Union of Los Angeles, Cal., for the beautiful national flag presented by that organization to the National Educational Association.

The resolution was adopted.

Director Butler announced that an unofficial message had been received from the peace conference at The Hague, stating that it had been successful in its labors in behalf of arbitration, and offered the following resolution, which was adopted:

Resolved, That the President of the National Educational Association be requested to send the following telegram of congratulation on behalf of the association to the American delegates to the peace conference now in session at The Hague:

"ANDREW D. WHITE,

Chairman American Delegation to Peace Conference, The Hague, Holland:

"The National Educational Association, in convention assembled, tenders American delegation to peace conference heartiest congratulations on success which has attended their noble efforts in behalf of principle of arbitration."

Miss Estelle Reel presented a petition, signed by twenty-five active members, for the formation of a department of Indian education. Secretary Shepard read the petition and the names of the signers, as follows:

To the Honorable Board of Directors of the National Educational Association:

We, the undersigned active members, respectfully petition that the Indian School Service Institute be made a department of the National Educational Association, to be called the Department of Indian Education.

C. W. GOODMAN, Superintendent Chilocco Industrial School, Arkansas City, Kan.
H. B. PEAIRS, Lawrence, Kan.
EDGAR A. ALLEN, Albuquerque, N. M.
S. M. McCOWAN, Phœnix, Ariz.
I. C. McNEILL, West Superior, Wis.
A. G. LANE, Chicago, Ill.
A. W. CLANCY, Chicago, Ill.
E. O. LYTE, Millersville, Pa.
NICHOLAS MURRAY BUTLER, Columbia University, New York, N. Y.
OSSIAN H. LANG, New York, N. Y.
L. M. DILLMAN, Chicago, Ill.
J. H. COLLINS, Springfield, Ill.
J. A. FOSHAY, Los Angeles, Cal.
EDWARD T. PIERCE, Los Angeles, Cal.
ED. F. HERMANNS, Denver, Colo.
G. B. MORRISON, Kansas City, Mo.
L. C. GREENLEE, Denver, Colo.
J. M. GREENWOOD, Kansas City, Mo.
W. T. HARRIS, Washington, D. C.
E. W. COY, Cincinnati, O.
C. H. AMES, Boston, Mass.
J. F. KEATING, Pueblo, Colo.
J. H. MILLER, Lincoln, Neb.
G. W. A. LUCKEY, Lincoln, Neb.
F. A. FITZPATRICK, Boston, Mass.

Director Butler explained that the government allowed a sum for an annual convention of Indian schools which was sufficient for the expenses of the new department.

Director Greenwood moved that the petition be allowed and the department created. The motion was duly seconded.

Director Soldan wished time for further consideration of this petition, and suggested that the matter be referred to the Executive Committee with power to act.

Director E. E. White stated that, if the new department was created, the proceedings should be printed in the volume as those of any other department.

Miss Reel replied that Congress empowered her to print the proceedings of the Indian school convention, and that she would furnish copies to all members of the National Educational Association.

Director Gove asked what real advantage it would be to the Indian schools if a new department was created under these conditions.

Miss Reel answered that there would be a great advantage to the Indian school workers in the fact of being members of the National Educational Association, and in being assured of the fellow-feeling and sympathy of other teachers.

Director Carrington asked if there was anything to prevent the Indian teachers from becoming members of the National Educational Association under the present conditions.

Director Greenwood spoke of the advantage to them with respect to railroad rates, providing they were a part of the National Educational Association.

Director White made a suggestion to insert the word "affiliated" before the word "department" in Director Greenwood's motion.

Director Fulton urged that it should be a full department, if created at all.

Director Gove explained that an "affiliated department" would be a department without official connection with the association, similar to the relations at present sustained by the National Herbart Society.

Director Beardshear, of Iowa, claimed that the additional expense to the association should not be considered in this matter; the National Educational Association is large enough to include all departments of educational work.

Director White moved to amend Director Greenwood's motion by inserting the word "affiliated." Seconded.

Director Bartholomew asked the chair if a proposal to create an "affiliated department" was in order. The chair ruled that, according to the constitution, Director White's amendment was not in order.

The original motion of Director Greenwood was called for and carried.

Director Taylor introduced the following resolution and moved its adoption:

Resolved, That the Board of Directors of the National Educational Association learns with profound grief of the deplorable railway accident at Newman on yesterday morning, whereby Mrs. Lena Thomas, of Seneca Falls, N. Y., and Miss Addie Harris, of St. Louis, Mo., members of the association, lost their lives, and many others were severely wounded, and which has passed such a pall over the deliberations of the association.

Resolved, That the Secretary of the association be instructed to express to the bereaved and suffering friends the heartfelt sympathy of the profession in all parts of the land.

The motion to adopt was carried by a rising vote.

The Secretary reported that By-Law No. 1, which provided for the appointment of a committee on nominations at the third session of the meeting, and also for a meeting of the active members to nominate members of the nominating committee at 2 P. M. on the second day of the meeting, were conflicting provisions, since, under the arrangement of meetings for the present year, the third session occurred before 2 P. M. on the second day. He had, therefore, acting under the advice of some members of the Executive Committee, taken the responsibility of changing the time for the meeting of the active members to 5:30 P. M. on Tuesday, the first day of the convention, subject to the approval of the Board of Directors. He asked the board to take action upon this matter.

Director Gove recommended that alterations in the by-laws be made, and moved that the Secretary be instructed to formulate the same and present them to the active members at the annual meeting. Seconded and carried.

Director Bartholomew moved to approve the action of the Secretary in making the announcements in the program of the time for the meetings of active members. Seconded and carried.

Director Butler offered the following resolution as a standing order, and moved its adoption:

Resolved, That the following standing order be adopted, until further action by the Board of Directors, to govern the printing and distribution of special reports on educational subjects issued by authority of the National Educational Association:

Of all such reports there shall be printed an edition of 1,000 copies, to be distributed by the Secretary of the National Educational Association, in conference with the chairman of the special committee making the report; such distribution to be without charge.

Additional editions shall be printed under the direction of the Secretary and offered for sale at a price sufficient to cover the cost of printing and postage; such price to be fixed by the Secretary in conference with the Executive Committee and the Board of Trustees.

Director Taylor, of Kansas, suggested that some provision should be made whereby larger editions for gratuitous distribution might be published when it seemed desirable.

Director Butler modified his resolution, with the consent of the second, by introducing the words "unless the Executive Committee otherwise orders" after the words "an edition of 1,000 copies." Carried.

Director Lane moved that J. H. Collins be elected as director from Illinois, *vice* E. A. Gastman, resigned. Seconded and carried.

Director Butler presented the matter of a division of the Department of Manual and Industrial Education, and submitted documents relating to the same, moving to lay these upon the table, expressing the hope that some action might be taken upon them at a later meeting of the Board of Directors. Carried.

A motion to adjourn was made, seconded, and carried.

IRWIN SHEPARD,
Secretary.

E. ORAM LYTE,
President.

MINUTES OF THE BOARD OF DIRECTORS FOR 1899–1900

FIRST MEETING

DIRECTORS' ROOM, CHAMBER OF COMMERCE, LOS ANGELES, CAL.—THURSDAY, JULY 13, 4:30 P. M.

The Board of Directors was called to order by President-elect O. T. Corson. The following directors were present:

O. T. Corson, Ohio; C. G. Pearse, Nebraska; Nicholas Murray Butler, New York; Newton C. Dougherty, Illinois; Aaron Gove, Colorado; J. M. Greenwood, Missouri; W. T. Harris, District of Columbia; Albert G. Lane, Illinois; E. Oram Lyte, Pennsylvania; F. Louis Soldan, Missouri; A. R. Taylor, Kansas; E. E. White, Ohio; Will S. Monroe, Massachusetts; A. S. Downing, New York; J. N. Deahl, West Virginia; F. C. Woodward, South Carolina; W. N. Sheats, Florida; McHenry Rhoads, Kentucky; H. C. Weber, Tennessee; W. M. Slaton, Georgia; J. H. Phillips, Alabama; R. B. Fulton, Mississippi; Alexander Hogg, Texas; J. R. Rightsell, Arkansas; J. A. Shawan, Ohio; J. W. Carr, Indiana; J. H. Collins, Illinois; D. W. Springer, Michigan; L. D. Harvey, Wisconsin; W. M. Beardshear, Iowa; F. B. Hubbard, Minnesota; W. T. Carrington, Missouri; J. H. Miller, Nebraska; Samuel D. Largent, Montana; L. C. Greenlee, Colorado; Mrs. Elizabeth R. Jackson, New Mexico; F. A. Cooley, Arizona; J. W. Daniels, Idaho; O. C. Whitney, Washington; E. D. Ressler, Oregon; John Swett, California; Irwin Shepard, Minnesota.

The minutes of the last meeting were read by the Secretary, and on motion approved.

The President announced that the first business of the meeting was the election of a member of the Board of Trustees to succeed A. G. Lane, of Illinois.

Director Harris nominated A. G. Lane to succeed himself. Director Greenwood seconded the nomination. Director Carrington, of Missouri, moved that the Secretary be authorized to cast the ballot of the Board of Directors for Mr. Lane. The motion was seconded and carried. The ballot was so cast, and Director Lane was declared elected as trustee for the ensuing period of four years.

Director E. E. White moved that Dr. W. T. Harris be elected to succeed himself as a member of the Executive Committee for the term of one year. Seconded and carried.

The Secretary read the following extract from the minutes of the meeting of the Board of Directors held in Washington last year, and, on request of Director White, explained the purpose of the amendment suggested:

EXTRACT FROM MINUTES OF BOARD OF DIRECTORS, JULY 11, 1898

Director L. D. Harvey, at the request of the Wisconsin delegation of active members, offered the following resolution, which was ordered to lie over for one year under the rule:

"*Resolved*, That the Board of Directors recommend to the general association that the constitution be amended as follows:

"Amend Art. III — Membership — by striking out sec. 3, and substituting therefor the following:

"'Any associate member eligible for active membership may become an active member upon the payment of the annnal dues for the current year.'"

Director Butler moved that consideration of the amendment be indefinitely postponed. Seconded and carried.

The President announced the Committee on Nominations of members of the Council as follows:

F. Louis Soldan, of Missouri. N. C. Dougherty, of Illinois.
Aaron Gove, of Colorado.

The President announced the next order of business to be the selection of place of meeting for 1900.

Director Greenwood moved that the speeches in presentation of the invitation from each city be limited to ten minutes. Seconded and carried.

The roll of states was called by the Secretary.

J. H. Hulsart, of New Jersey, presented an invitation from Ashbury Park.

Director F. C. Woodward, of South Carolina, presented an invitation for the association to meet in Charleston. Director Fulton, of Mississippi, seconded the invitation. Directors Carr, of Indiana, and Phillips, of Alabama, also spoke in favor of Charleston.

D. S. Anderson, of Tennessee, invited the association to meet in Chattanooga.

E. W. Coy, of Ohio, presented an invitation from Cincinnati.

D. W. Springer, of Michigan, invited the association to meet in Detroit in 1901.

A. E. Winship, of Massachusetts, invited the association to meet in Boston.

The Secretary reported that he had received communications from the city of Montreal inviting the association, and that a committee of delegates from that city was present in Los Angeles for the purpose of personally extending such invitation.

As no one had appeared to present the invitation of Montreal, Director Lane moved that the matter be passed, and the letters of invitation, which had been received, referred to the Executive Committee with the invitations from other cities.

Director Greenwood moved that an informal ballot be taken, each director expressing his first, second, and third choice. Seconded. Director Pearse moved to amend the above motion to read that each director vote for but one place, as his first choice. After some discussion, both motions were withdrawn, and Director Gove moved that the Board of Directors proceed to take an informal ballot for choice of meeting place, each director voting for one place, with the understanding that the matter would be referred to the Executive Committee for final decision. Seconded and carried.

The chair decided that each member should cast his ballot as the roll of directors was called, and appointed Directors Greenwood and Phillips as tellers.

The vote to express a choice for the next place of meeting was then cast.

The Committee on Nomination of members of the National Council then made the following report:

To the Board of Directors of the National Educational Association:

Your Committee on Nominations for membership of the National Council of Education submits the following:

1905. W. H. Bartholomew, to succeed himself; term to expire in 1905.
F. A. Fitzpatrick, to succeed himself; term to expire in 1905.
E. Oram Lyte, to succeed himself; term to expire in 1905.
J. M. Greenwood, to succeed himself; term to expire in 1905.
I. C. McNeill, to succeed Henry Sabin; term to expire in 1905.
1904. James H. Canfield, to succeed himself; term to expire in 1904.
1902. Arnold Tompkins, to succeed E. C. Hewett; term to expire in 1902.
Charles M. Jordan, to succeed Charles A. McMurry; term to expire in 1902.
1901. R. B. Fulton, to succeed J. R. Preston; term to expire in 1901.
1900. James A. Foshay, to succeed C. C. Rounds; term to expire in 1900.

F. Louis Soldan, *Chairman.*
N. C. Dougherty.
Aaron Gove.

Upon motion, the report was adopted, and the nominees were declared elected to membership in the Council for the terms indicated.

Dr. E. E. Brown, of California, by permission, spoke of the proposed millennial celebration of King Alfred in October, 1901, and asked that a committee be appointed to consider this matter. Director Harris moved that the communication presented by Dr. Brown be made a part of the minutes, and Professor Charles Mills Gayley be made the representative of this body in this matter. Seconded and carried.

UNIVERSITY OF CALIFORNIA, BERKELEY, CAL., July 10, 1899.

To the President and Members of the National Educational Association:

GENTLEMEN: It is undoubtedly known to your honorable body that it is the intention of the various learned societies of the Anglo-Saxon race to celebrate the one-thousandth anniversary of King Alfred's death, which will fall on October 26, 1901. It is expected that representatives of every side of Anglo-Saxon life, and from every clime in which there flourishes a branch of the race, will then gather at Winchester, the ancient seat of King Alfred's monarchy, to do this hero, saint, king, and teacher of our common race the honor that is his due; and so to make the international commemoration "a real festival of the industry, art, order, union, peace, and religion" that we all — English, Canadian, American, Australian, Anglo-Indian, or Anglo-African — have inherited from the prudence and the valor of our common sire, King Alfred.

I have been requested — probably because it was my good fortune, while in England a year ago, to assist at the inception of this enterprise — to lay the matter before the National Educational Association.

Since Professor Bright, of Johns Hopkins, in making this request, enters into certain explanations of the intention of the governing committee, I will ask you to listen to his letter, which is here inserted:

MODERN LANGUAGE ASSOCIATION OF AMERICA, May 31, 1899.

MY DEAR PROFESSOR GAYLEY:

I have accepted the appointment of honorable secretary for America of the Alfred memorial celebration. Your name is already on the English list of patrons; I hope now to place it on the American committee. You know that it is hoped to have a meeting of the learned societies on the occasion, and we shall have to consider just what can be done in that way. The month of October will not be favorable to have regular meetings of the American societies, but it may be possible to have all the leading organizations send a delegate or two to be present. This delegate should be prepared to give a brief historic account of the society he may represent. Moreover, each society should deposit at Winchester, at that time, a complete set of its publications.

After my visit to England this summer (I leave June 15) I shall have this matter formulated, I hope. But in the meantime I wish the matter to be presented before all the important learned societies that may meet this summer. My special request at this time, therefore, is that you lay the subject before the National Educational Association at its meeting, July 11–14, at Los Angeles. Commissioner Harris agrees with me that you are the proper person to do it. Inasmuch as there will not be time to receive a letter from you before my departure, I beg you to take the matter in hand; and if it is quite impossible for you to be present at the meeting, I hope you will secure the service of someone to read your appeal.

My hope is that you will co-operate with me in representing the cause on the Pacific. We shall have to get the most prominent men on the committee, and we shall also have to get contributions of money from the richer ones.

Please think over the entire subject, and let us discuss ways and means when I return in October.

Yours very truly,

JAMES W. BRIGHT.

I acceded to Professor Bright's request, and had intended to present this matter in person, but unfortunately, at the last moment, I am confined to my bed and am compelled to inflict upon you a written statement of the case.

My personal acquaintance with the movement for celebrating the *millennary of King Alfred* is as follows:

On October 18, 1897, an address was delivered in Birmingham by Frederic Harrison, the well-known writer and positivist philosopher, calling attention to the approaching thousandth anniversary in 1901, and urging co-operation for its proper observance. Several of my Oxford friends, notably Mr. Louis Dyer and Professor Dicey, becoming interested in Mr. Harrison's suggestion, thought that I might be of service in supplying information concerning the learned societies of the United States whose interest should be enlisted; hence a correspondence with Mr. Harrison, and an interview with the mayor of Winchester, in whose town the anniversary is to be celebrated. I had also the honor of representing the universities of California and Michigan, as their delegate at the first preliminary meeting for the consideration of an Alfred memorial, which was held at the Mansion House in London, March, 1898. At this meeting it was determined

to organize the proper committees, and to solicit the interest of the representative societies of the Anglo-Saxon race. The most notable Englishmen have been placed upon the list of patrons. Colonel Hay expressed his approval of the movement, and it is not improbable that some recognition of the anniversary will follow from America as a nationality.

The purpose of the movers is the reverse of sensational. In a letter which I received from Mr. Harrison on February 12, 1898, he says:

Like yourself, my own interest in this is very largely *anti-jingo;* and, without controversial question, it serves to direct the minds of Englishmen to the idea of a true patriotism, and to an enthusiasm for a great chief, whose memory can unite all English-speaking races and nations, and can arouse not a spark of soreness in men of any nation, race, or creed. It caught my fancy to hold up the memory of the greatest name of our common race — of almost the only English hero whose name is without offense to us all — English, American, Scotch, Irish — Catholic, Presbyterian — soldier or sailor.

The opportunity of participation in this international celebration of the common achievements and ideals of the mighty race of which we are a scion should certainly appeal to our National Educational Association, meeting as it does this year at the far western gate of Anglo-Saxon civilization. And how proper it is that the largest, and probably the most influential, educational body of the Anglo-Saxon world should join in honoring the millennary of the greatest of Anglo-Saxons and the first of English teachers, will appear upon consideration of the life and character of King Alfred.

You will certainly agree with me that no one can better state the merits of the king than he who is the prime mover in this celebration of his anniversary. I consequently borrow from Mr. Frederic Harrison's Birmingham address, adapting it, when I please, to the conditions of the present paper:

I trust [says Mr. Harrison] that in the first year of the twentieth century the English-speaking world may unite in its tribute of homage to the hero-saint who was the true father (if any man can be so styled) of our common literature, "the model Englishman," as Freeman calls him, the herald of our civic and religious organization. Do we, English or American, even yet measure at its full height the supreme glory of this hero of the race? It is a commonplace with historians that our English Alfred was the only perfect man of action recorded in history; for Aurelius was occasionally too much of the philosopher; Saint Louis usually too much of the saint; Godfrey too much of the crusader; the great emperors were not saints at all; and of all more modern heroes we know too much to pretend that they were perfect. Of all the hyperboles of praise there is but one that we can safely justify with the strictest canons of historical research. Of all the names in history there is only our English Alfred whose record is without stain and without weakness — who is equally among the greatest of men in genius, in magnanimity, in valor, in moral purity, in intellectual force, in practical wisdom, and in beauty of soul. I have been studying of late the whole series of the authentic sources for his recorded career from infancy to death, and I have found no single trait that is not noble and suggestive, nor a single act or word that can be counted as a flaw.

It is true that the field of Alfred's achievements was relatively small, and the whole scale of his career was modest, indeed, when compared with that of his imperial compeers. He inherited a kingdom which covered only a few English counties, and at one time his realm was reduced to a smaller area than that of some private landlords of modern times. But it is *quality*, not *quantity*, that weighs in the impartial scales of history. True human greatness needs no vast territories as its stage, nor do multitudes add to its power. That which tells in the end is the living seed of the creative mind, the heroic example, the sovereign gift of leadership, the undying inspiration of genius and faith.

Turn to the *Chronicle* and to Asser's *Life*, with the help of Pauli, Freeman, and Green, and mark, learn, and inwardly digest those miracles of patience, valor, indomitable energy by which the great king rescued from the savage Norsemen the England of our forefathers. Watch him as he returns to the charge after every repulse, rallies his exhausted men, gathers up new armies, plans fresh methods of war, and at last wins for his people prosperity, honor, and peace.

The annals of war have nothing grander than the long record of sagacious heroism by which Alfred saved England for the English. Then note the genius with which he saw that the Norsemen must be met on the sea, with which he organized a navy of ships built on a new design of his own. Alfred is not only the forerunner of Marlborough and Wellington, but he is also the forerunner of Blake and of Nelson.

But the civil and literary achievements of Alfred's reign are even more brilliant than his feats in war, though he must always rank with the first warriors of the English name. The skill with which he organized a sort of regular militia to take the place of hasty levies from time to time, the wise and cautious form of his laws, the reform of the judicial service, the discipline of his own household, his zeal for art, his enthusiasm for building, his passion for poetry, his profound love of history; his dignity, his grace, his tenderness, his manly piety — all are alike great, spontaneous, and beautiful; all are in harmony; none are in excess. In a true sense he is the founder of a systematic army for purposes of defense. And he is the inventor, if not the

actual founder, of a national navy — of that sea power which is the birthright of the Anglo-Saxon race, whether insular, colonial, or American.

The mark of Alfred as king is the creative mind. He created in men's minds, from the Severn to the Humber, the sense of solidarity as a nation. By incorporating the conquered Danes as Christian allies, he virtually created the composite England of history. His whole conception of the ruler, as related in the *Chronicle* and in his own writings, has the stamp of insight, practical wisdom, devotion to duty. It is at once creative and conservative; prescient of a distant future, yet averse to all violent change. His legislation was deeply infused with a conservative, and even a biblical, spirit; but in the administration of justice he showed the most trenchant energy and a passionate zeal for reform. His relations to the church and to education were wholly without a cloud or a blot — alike free from the violence or the impolicy which too often discredited even the noblest sovereigns of his age. They present the normal relations between the temporal and the spiritual powers. How beautiful, how wise, how beneficent were the king's call to his side of Asser, the Briton, from Wales; of Grimbald, the Frank, from St. Omer; of John, from Westphalia; of Plegmund of Mercia, his archbishop of Canterbury! To Alfred religion, culture, intelligence had no local limits. He was essentially European, even cosmopolitan, in his genius. Freely to learn and freely to teach — these were the twin ideals of his intellectual life. What nobler evidence of the teacher born to the profession! And shall we, teachers of King Alfred's race, today — descendants in a far-distant clime of those whom he lived to teach and for whom he built the island-home into a fortress of *freedom* and *truth* — shall we hesitate to join with our brethren overseas in honoring the great teacher of the common race?

Freely he learned; freely he taught. He had known all that was foremost in the civilization of the century; he resolved to transplant it to England. His mission to the Christians of India, his frequent missions to Rome, his voyages of discovery to the North Cape and the Baltic under Ohthere and Wulfstan, were his message to the world that Britain was no longer an *ultima Thule*, but henceforth was to march in the van of progress. He was, says Freeman, "the spiritual and intellectual leader of his people."

Yes, it is in his own writings that we come to love Alfred best. No ruler of men has left us so pellucid a revelation of his own soul. Like the *Meditations* of Aurelius and the Psalms of David, he has given to men the outpourings of his aspirations and his sorrows. Here, indeed, we are in the presence of one who is a teacher as much as a king — who recalls to us Augustine and à Kempis, or Bunyan and Jeremy Taylor. His *Boethius* served him as texts whereon he preached to his people profound sermons on the moral and spiritual life. Read his homily on Riches — "that it is better to give than to receive;" on the true Ruler — "that power is never a good unless he be good that has it;" on the Uses of Adversity — "no wise man should desire a soft life." Few men ever had so hard a life; but amidst it all we have the king in his silent study pouring out poetic thoughts on noble themes, composing pastoral poetry, or casting into English old idyls from Greek epic or myth, ending with some magnificent *Te Deum* of his own composition.

And with all this spiritual fervor, this literary genius, this passion for culture, how wonderful is the many-sided energy of the man — his skill and delight as a huntsman, his love of ballad, anecdote, and merry tale, his love of all noble art, his zeal as a great builder, his ingenuity in mechanical contrivance, his invention for measuring time, his planning a new type of battleship — his supreme foresight in refounding the desolated city of London! In the multiplicity of gifts, the hospitality of interest, the fertility of mind, the promptness of action, the never-wearied zeal, this king was surely a Yankee before the "Mayflower;" an American before Edison or the city of Chicago! Still no life better than that of King Alfred can teach us, the restless and driven American descendants of his race, that the rush of life is the ruin of it. For no man ever so perfectly fulfilled the rule, "Without haste, without rest." "I have desired," he wrote, "to live worthily while I lived, and after my life to leave to the men that should be after me a remembrance in good works." And Alfred the "Truth-teller" — as an annalist calls him — never uttered words more true.

Let me sum up all these qualities and deeds in the words of a brilliant historian — in words as true as they are eloquent. "Alfred," says Mr. Green, "was the noblest, as he was the most complete, embodiment of all that is great, all that is lovable, in the English temper. He combined, as no other man has ever combined, its practical energy, its patient and enduring force, its profound sense of duty, the reserve and self-control that steadies in it a wide outlook and a restless daring, its temperance and fairness, its frank geniality, its sensitiveness to affection, its poetic tenderness, its deep and passionate religion."

On October 26, 1901, about two years hence, a thousand years will have passed since the death of the greatest ruler of the race. That will be no ordinary occasion, for it will be the thousandth anniversary of him to whom the race — British and American, monarchical and republican — owes an incalculable debt of gratitude; one whom our best teachers describe as the noblest Anglo-Saxon in our history. Alfred's name is almost the only one in the long roll of the worthies of the race which awakens no bitter, no jealous thought, which combines the honor of all; Alfred represents at once the ancient monarchy, the modern state, the army, the navy, the law, the literature, the poetry, the art, the enterprise, the industry, the religion of our race. Men of all creeds and climes; parties, factions, provinces, nationalities; of every trade, profession, or class, may unite in celebrating the common hero of the race. For Alfred was a victorious warrior whose victories have left no curses behind them; a king whom no man ever charged with a harsh act; a scholar who never became a pedant; a saint who knew no superstition; a hero as bold as Launcelot, as spotless as Galahad.

The commemoration of this glorious founder of our liberty, law, and learning — of a man so close to the very roots of the throne, so dear to the sympathies of the people, at home or abroad, monarchical or republican, bound up with all our traditions and institutions, the inspiration of our early literature and language —

such a commemoration should be a national, not a private, concern. It should, indeed, be international, not national.

I would suggest, Mr. President, that the National Educational Association proceed at once to the election of a delegate who shall represent the association at the King Alfred memorial celebration in Winchester, in October, 1901. This delegate should be chosen *now*, that he may have leisure to prepare himself properly to present the history of the association in written form, and to make the other arrangements necessary for the occasion. I would suggest, also, that the Secretary and the Treasurer of the association be appointed to act with the delegate as a committee of three to confer with the proper authorities in charge of the anniversary, to report methods and means to the National Educational Association at its next annual convention, and to take charge of the representation of the association until occasion for its continuance shall have ceased.

Yours, very respectfully,

CHARLES MILLS GAYLEY,

Professor of the English Language and Literature, University of California.

Director White, of Ohio, introduced a resolution to amend the action taken last year in regard to the amended spelling by adding "except when the author of a paper formally requests the use of the standard spelling therein."

Director Gove expressed himself as in favor of standing by the reform spelling.

Director White questioned the authority of the board to adopt this spelling for the association.

In the vote upon this amendment a division of the house was called for, and the resolution was adopted by a vote of 25 to 13.

Director Taylor, of Kansas, presented a communication from the Council asking for an appropriation of $1,200 as prizes for essays upon school architecture and hygiene.

EXTRACT FROM MINUTES OF THE NATIONAL COUNCIL

The following resolution by Dr. White, of Ohio, was carried :

"*Resolved*, That this Council hereby approves of the thoro investigation of the subject of school hygiene as proposed by the report of the Department of Superintendence submitted by its committee, and it is recommended to the Board of Directors that an appropriation not exceeding $1,200 be made for this purpose, for the expenses of a special report or for prize essays, as may be hereinafter determined."

Dr. Harris offered the following resolution, which was also carried :

"*Resolved*, That in case of the appropriation by the Board of Directors of the sum of $1,200 for the purposes named in this report, two prizes be offered for essays on each of two topics named, to-wit: a first prize of $200 and a second prize of $100."

Resolution of George P. Brown, of Illinois :

"*Resolved*, That a committee of five, of which the president of the Council shall be one, be appointed to present this matter to the Board of Directors, and to arrange for the securing of the prize essays referred to in the above resolutions, provided the Board of Directors grants the appropriation."

The committee was appointed as follows : President A. R. Taylor, Dr. W. T. Harris, George P. Brown, Dr. William F. King, Superintendent Aaron Gove.

After discussion, Director Carr, of Indiana, moved that an appropriation of $1,200 be made for this purpose, in accordance with the plans outlined by the National Council. Seconded and carried.

The Secretary reported the result of the vote on place of meeting in 1900 as follows :

Charleston	22
Asbury Park	1
Cincinnati	3
Chattanooga	2
Boston	11
Montreal	1

Director Dougherty moved that, when the board adjourn, it adjourn to meet Friday afternoon at 4 : 30 o'clock in the same place. Seconded and carried.

On motion, the Board of Directors adjourned.

SECOND MEETING

DIRECTORS' ROOM, CHAMBER OF COMMERCE, LOS ANGELES, CAL.—FRIDAY, JULY 14, 4:30 P. M.

The meeting of the Board of Directors was called to order by President-elect Oscar T. Corson.

The following directors were present:

O. T. Corson, Ohio; C. G. Pearse, Nebraska; Nicholas Murray Butler, New York; Newton C. Dougherty, Illinois; A. R. Taylor, Kansas; E. E. White, Ohio; John S. Locke, Maine; A. S. Downing, New York; W. N. Sheats, Florida; McHenry Rhoads, Kentucky; J. A. Shawan, Ohio; D. W. Springer, Michigan; W. G. Carrington, Missouri; O. C. Whitney, Washington; John Swett, California; Irwin Shepard, Minnesota.

By consent, the reading of the minutes of the last meeting was dispensed with, and the Secretary and President were authorized to approve the same for publication.

The Secretary read the following communication from the Council:

To the Board of Directors of the National Educational Association:

In accordance with a provision of the constitution, the Council directs me to submit to you the following report:

One year ago a committee of fifteen, with President W. R. Harper, of Chicago, as chairman, was appointed by the Council to investigate and report on the subject of a national university. Said committee found it impossible to present even a preliminary report at this meeting, but will probably be able to report at the meeting in 1900.

Several members of the Council and of the Library Department insisted that the minutes of the Council did not show the exact nature of the motion providing for the appointment of the committee to report on the relation of libraries to the public schools, the preliminary report having already been made after a year's investigation. After some correspondence, it was finally agreed by the Executive Committee of the Council, in accordance with the plan suggested by President Lyte, that the Library Committee should proceed with its investigations and make its final report at this meeting, using the funds appropriated for that purpose by the Board of Directors. The report was presented to the Council thru the chairman of the committee, Librarian J. C. Dana, of Springfield, Mass., at its meeting on Tuesday morning. It is regarded as one of the most valuable reports ever submitted to the Council, and it is hoped that the Executive Committee of the association will provide for its liberal distribution and sale.

The Committee on Normal Schools appointed by the Normal Department four years since, thru its chairman, President Z. X. Snyder, also presented an exhaustive report on the functions and organization of normal schools. It is agreed that nothing else in our literature so completely and so clearly covers these problems, and its circulation in pamphlet form will undoubtedly be provided for by the Executive Committee.

The preliminary report of the Committee of the Department of Superintendence on School Hygiene was presented thru its chairman, Hon. W. T. Harris. It recommends an appropriation of $1,200 for securing prize essays on the four phases of the subject, as already outlined to you and approved at your meeting yesterday.

You are referred to the minutes of the Council for information concerning the other papers presented. Special attention is called to the report of Dr. Nicholas Murray Butler on "The Educational Progress of the Year." It will be found invaluable for reference and suggestions.

The paper on "Do We Need a University Trust?" was referred to the Committee on the National University.

The petition of the Art Department for an appropriation of $600 for completing the report of its special committee on a basis for a course of study in elementary art education, referred to the Council yesterday, was referred to a special committee, with Principal A. S. Downing, of New York, as chairman, to report at the next meeting of the Council.

The Executive Committee of the Council was allowed $250 for expenses for the year. The total expenses were $14.69, which have been properly certified. I offer the suggestion that the balance of the $250 be placed at the disposal of the Executive Committee of the Council for the coming year.

Respectfully submitted,
A. R. TAYLOR,
President.

Director Dougherty moved that the communication be received and the recommendations be concurred in. Seconded and carried.

Secretary Shepard read a communication from the Department of Manual and Industrial Education:

LOS ANGELES, CAL., July 13, 1899.

To the Board of Directors of the National Educational Association:

GENTLEMEN: The Department of Manual and Industrial Training has voted to request your honorable body to change the name "Manual and Industrial Department" to "Manual Training Department." The secretary of the department was instructed to communicate this action to you.

Very respectfully yours,
J. E. ADDICOTT,
Secretary.

Director Butler explained that this communication covered the same ground as the matter which he had presented at the first meeting of the board this year, and moved that the Department of Manual and Industrial Education be hereafter known as the Manual Training Department. Seconded and carried.

The following communication from the director from Pennsylvania was read:

WESTMINSTER HOTEL, LOS ANGELES, CAL., July 14, 1899.

To the Board of Directors of the National Educational Association:

GENTLEMEN: Last year the National Educational Association allowed Professor Skidmore, director for the state of Pennsylvania, $50 for advertising the Washington meeting. The number of teachers at Washington from Pennsylvania did not exceed 250. The number of teachers at Los Angeles will at least reach 400. I think we can safely say that we have twice as many people from the state of Pennsylvania at Los Angeles as Professor Skidmore took to Washington. I well know that the law allows us only $25 for expenses, but if you can see your way clear to approve of the bill which we have presented, state director and district managers of Pennsylvania will appreciate your kindness.

Large states like New York and Pennsylvania should receive a larger donation than the smaller states. Postage alone will amount to $50. Hoping you can approve the bill presented, in order that Secretary Shepard may audit it, I am,

Yours truly,
GEORGE HOWELL,
Director for Pennsylvania for 1898–99.

Director Downing, of New York, moved that the matter be referred to the Executive Committee with power to act. Seconded and carried.

By consent of the board, Dr. S. P. Robbins, of Montreal, explained the reason for the absence from the meeting yesterday of the Montreal delegation, and presented an invitation for the association to meet in Montreal in 1900. Questions were asked of Mr. Robbins by Directors White, Pearse, and Downing. Dr. Robbins' invitation was seconded by other gentlemen of the Montreal delegation.

Director Downing asked that an amount equal to that of former years be set aside for the Department of Superintendence.

Director Pearse moved that an appropriation be made for this purpose, not to exceed $300. Seconded and carried.

On motion, the Board of Directors adjourned *sine die.*

IRWIN SHEPARD,
Secretary.

O. T. CORSON,
President.

GENERAL SESSIONS OF THE ASSOCIATION

ADDRESSES OF WELCOME

HENRY T. GAGE, GOVERNOR OF CALIFORNIA

Mr. Chairman, Members of the National Educational Association, Ladies and Gentlemen:

We should never forget the great debt of gratitude which we owe to the memory of the sturdy pioneers of the East, West, North, and South, whose heroism, industry, and perseverance hewed, in the primeval forest, blockhouses and established villages, forming the barriers against savage attacks, and there created the nucleus of American civilization. The ax, the shovel, the pick, and the plow, in the hands of this vanguard of progress, removed the cumbersome obstacles left by nature, put fertile fields and fruitful orchards in the dark recesses of the backwoods, and by their rugged trails prepared easy routes for the railway engineer, whose works now attract the wonder and admiration of the modern traveler. These achievements, tho under the direction of high intelligence, nevertheless represent in the history of our American people the era of matter —the era of physical strife.

But man's needs are mental as well as physical. Shelter, food, raiment, and rest constitute a portion only of our desires. The great Creative Power which spoke amid the darkness and solitude at the world's birth, saying, "Let there be light!" likewise spoke into the senseless clay the mightier words: "Let there be mind!" And, thus inspired by that divine injunction, man, since that first electric current of thought sped thru his brain, finds daily need of intellectual development.

Therefore, in the track of the hardy pioneer followed the teacher and the scholar. The blazed forest trees and monuments of rock marked the pathway of the frontiersman; the book, the tablet, and the pen showed the teacher's line of march. While the ground was plowed, the minds of the man, the woman, and the child were taught to reason and to know. The blockhouses were transformed by the wizards of education into schoolhouses. The humble house of worship, formed of unshapely timber, was changed into the pretentious church, with its chaste tapering spire piercing the sunlight in its heavenward course, and attesting the marvelous growth of mind and morals. The log cabin of the forester became the elegant villa of the merchant. The scholar, statesman, artist, sculptor, and mechanic—all better housed and better fed—sprang up

amid the scenes which once knew only the toils and perils of the Indian fighter.

Thus was evolved in our American history the era of mind.

To you, ladies and gentlemen of the National Educational Association, whose noble profession imposes the duty of cultivating the minds of the future men and women who will labor, instruct, and adorn in the fields of American art, letters, and government — to you, earnest and devoted disciples of learning, and worthy successors of the American pioneers of knowledge, the people of California look with confidence for the advancement of the splendid educational work of your predecessors.

On behalf, therefore, of the people of this state, I, as the executive, am afforded the high honor of greeting you each and all, and bidding a sincere and hearty welcome to our coast; and, trusting in your matured intelligence, wisdom, and scholarship, I fervently hope that our own schools, as well as the schools of other states, will reap the fruits of your timely visit and your wise deliberations.

THOMAS J. KIRK, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, CALIFORNIA

Educators of America:

Greeting from the teachers of California. All the gates of the golden West are flung wide open to you. Our mountains part to admit you, the valleys smile at your approach, the evening breezes whisper their approval, all nature sings together for joy, and all our people join in the chorus of welcome. Even old Sol beams upon you with a warmth of affection which he rarely bestows upon those native here and to the manor born. If you are weary from travel, here find refreshment and repose. If the heat and sands of the desert have made you thirsty and covered you with dust, our streams and fountains sparkle with the water of life, and our surf removes all stains but those of conscience. Tarry with us as long as ye may, visit every portion of our state — a vast empire on the Pacific coast. The grandeur of our mountains and the quiet beauty of our valleys will delight your eyes; the murmur of our pines and the music of our ocean will charm your ears. The world has heard the big guns of our "Oregon," "Monterey," and "Olympia;" it will be your privilege during this meeting to hear other big guns of California — our Jordan, Brown, Foshay, and others.

Our climate will rejuvenate your entire being. Los Angeles real-estate dealers will sell you this climate at $10 per square foot.

You have seen small specimens of our fruits in the East; here you will find the real article, such as we ourselves use or keep for distinguished guests. All things grow to great size here, even our prices and our stories. Those are not pumpkins hanging on yonder trees; they are the golden

fruit of Hesperides, the far-famed oranges of California. No dragon guards them; the dog is chained; the barbed wire is down; approach and help yourselves. Take a siesta under our fig tree, pluck the fruit of our vine. Sip our vintage, if you wish — just a taste, that you may know whereof you speak. Visit our raisin vineyards, our orchards of prune, pear, peach, almond, apricot, walnut, olive. Soil and sunshine have been generous beyond measure to our people; they wish to be equally generous to you.

Our broad acres of grain, stretching beyond the reach of eye, feed the hungry multitudes of the Old World; our bean fields furnish brains for Boston; our forests are housing the dwellers on all the boarders of the vast Pacific; our mines of gold and silver still fill with strength and vigor the veins and arteries of your commerce; our copper mines are supplying the commercial and intellectual world the nerves along which flashes the electric spark, binding forty-five states into one great nation, uniting the peoples of earth into one universal brotherhood; and, most valued of all, our educational system, crowned by two great universities, is training the brains which shall give mental and moral guidance to the entire body politic.

On this western shore, separated in large measure by the mountains and desert from the influences of the East, cut off from the traditions of the past, education has taken on some new phases of development and has had phenomenal growth. Our system of raising revenue for school maintenance is unique. It is what we believe to be a happy blending of the state, the county, and the district system. We maintain school in all the districts of the state an average of 8.7 months. We pay to teachers of all grades an average annual salary of $659. Twenty-seven in every hundred of our teachers are professionally trained, twenty-three of these being graduates of our own universities and normal schools.

During the last ten years secondary and higher education have had an unprecedented growth. By the beneficence of Senator Stanford and the continued generosity of his wife, the great university bearing the name of their lamented son has been established, and now enrolls 1,100 students. Its endowment is over twenty millions of dollars. Within the same period our colleges at Berkeley have increased their enrollment from 350 to 1,700. Including the affiliated colleges located in San Francisco, our state university now has a total enrollment of 2,438. But numbers do not tell the whole story. There has been an enlarged curriculum to meet the growing demands of modern life. The university at Berkeley, looking out from her hills thru the Golden Gate and beholding beyond the Pacific new fields for peaceful conquest, has established a school of mechanical arts and a college of commerce. We are among the first of the universities of the world to recognize and act upon the fact that business pursuits as

well as the learned professions demand special preparation and broad culture.

In 1889 there were but sixty-two high schools in the state. Today there are 125. With increase in numbers the standard of the work has been raised. The majority of our high schools are changing, or have changed, from a three- to a four-year course. Our elementary schools, the people's colleges, have advanced *pari passu* with our high schools. They are rightfully recognized as the basis upon which the whole superstructure of our educational edifice is erected. Our rural schools are the special pride of California.

For the preparation of teachers pedagogical departments have been established in both our universities, and our normal schools have been increased from two to five.

All this advance and interest in education is in response to the demands of the spirit of progress that pervades the people of California. And yet we have fallen short of our ideals. According to Commissioner Harris, 82 per cent. of the attendance in the public schools of the United States is in the first three years. Our records show a great advance over this average; still, we realize that we are giving the masses of children inadequate preparation for the best citizenship. This presents us with two problems — how to increase the number of years of attendance at school, and how to continue education after school.

Why is the schooling of so large a majority limited to three or four years? For this there are several reasons. The first is poverty, real or imagined, which demands the labor of the child for the support of the family. The remedy for this is compulsory education. The child is the ward of the state, and the state, for its own preservation, must insist upon intelligent citizenship. The state, therefore, must furnish all that is necessary to the education of the child, even tho that should be its entire support. The second cause is failure on the part of the parent and the community generally to appreciate the value and importance of education. Frequent parents' and teachers' meetings, discussions of educational questions thru the public press, will create an enlightened criticism of school work. A good school is the product of the community, not the sole work of the teacher. A third reason for children leaving school at so early an age is failure of the school to take hold of the vital interests of the child. We need a better knowledge of children. The difference between the adult and the child mind is not one of quantity, but rather of quality. We have too long considered the child the miniature man, whereas he is a different being. We must know the child as he is, that we may educate him from what he is to what he should become. The child soon wearies of that subject which does not arouse his present interest. School is not merely a preparation for life, it is actual living. Life properly begun in school will continue beyond its door.

The present century has been called the age of public schools; the next may be the age of public education. The nations of antiquity had their great scholars and profound learning, while the masses were left in dense ignorance. The Middle Ages established great universities, but all preparation for them was at private expense. Only the favored son of wealth or the special beneficiary of charity could become an educated man. Today all grades of schools are open alike to the prince and the pauper. The democracy planted in America has diffused its spirit even into the monarchies of the Old World, and their governments are being popularized in everything but name. Free public schools and popular government must ever go hand in hand. The system of free public schools had its origin and growth in America; it is fast establishing itself in every country of Europe. But education is never completed in schools —not even in the halls of the college.

Life is constantly presenting new problems, both for the individual and for the nation. The correct solution of these demands continued study. The public as well as the children need educating A free press is a powerful educator to him who has been trained to discriminate and to think as he reads. Public parks, museums, libraries, art galleries are great educational agents. It is for us, the teachers, so to connect school work with these institutions that the intellectual growth begun in school may continue thru life. We shall thus make the twentieth century the age of public education.

Among other problems which confront us in California are the relations of the various parts of our educational system to one another—of the high school to the university, of the high school and university to the normal schools; the scope and place of manual training; the value of kindergartens and how to secure it; continuous sessions in our higher institutions and vacation schools in our lower; improvement of the teachers while in service; employment of teachers and their continuance in positions solely upon merit; the education of the masses to a higher and fuller appreciation of what is truest and best in education.

We appeal to you for aid in the solution of these problems. You bring to us the experience of the older states, joined to your own wisdom and ripe scholarship.

We welcome you, members of the National Educational Association, to all the bounty and hospitality for which California has long been noted. Take from us all that you can bear away. We will ever be your debtors for the good counsel and lofty inspiration which you will leave us.

In the name and on behalf of ten thousand teachers and a million and a half of people interested in education I bid you thrice welcome. Aloha! Aloha!! Aloha!!!

ELMER E. BROWN, UNIVERSITY OF CALIFORNIA, STATE DIRECTOR

Fellow-members of the National Educational Association, Ladies and Gentlemen:

I am sure that all Californians who look upon this company feel like saying, with Miranda:

O wonder!
How many goodly creatures are there here!
How beauteous mankind is! O, brave new world
That has such people in 't!

The city of Los Angeles has long been trying to live up to its name —Los Angeles, "City of the Angels." Its efforts in that direction reached their climax when it invited the National Educational Association to meet here; and it has never before been so well worthy of the name as it is today. We of California are all of us *Angeleños* today; and we all unite in saying: Welcome to you, angels, messengers of education!

And yet I must say that we have already somewhat against you. You are all too prone to encourage us in telling big stories. Any one of us, the poorest story-teller among us, can stand around the hotel lobbies telling even the smallest truths about California, and you listen so attentively that you tempt us to tell more; and so we go on, and I don't know where we shall stop. I beg leave to call a halt in this matter right here at the beginning. We don't want to tell you about California. There is a great deal here to tell you about, to be sure, but we will not tell it. We teachers think that there is a great deal to tell about the educational system of California. We have here, for instance, perhaps the finest provision for country schools to be found outside of Massachusetts; but we are not going to tell you that. We shall restrain ourselves from speaking about our magnificent system of county school supervision, one of the best—but never mind; we will not tell you that. We have some normal schools here that have been growing magnificently. And we have some universities, with tremendous endowments, that have been showing their enterprise by keeping poor in spite of their endowments. But we won't tell you about these things. We have important supplementary institutions here. We are proud of our institutions for the defective classes; of the beginnings that we have made in education of an industrial character. But we are not going to tell you about these things. We want to give you a chance. So please don't listen so patiently when we start on these topics. Don't encourage us.

You are messengers of the wisdom of this great country. You come to us in our isolation. You thought we were isolated after you got over that desert, did you not? You have come to us away off here to correct us of our provincialism. You come to us from the great world. You come from educational communities where teachers are appointed only for merit, and we are glad to know it. You come from those parts of the

country where school funds that were intended for the payment of teachers are never diverted to any other use — and we are glad to see you! Teach us these things, for we want them here. And so I say it in all earnestness, and not merely in jest: You come to us from this great country, with all of its wealth of educational knowledge and inspiration. We want to have your message. Come to us as angels indeed. Education in California, we trust, will never from this time forth be what it has been, and that because you have come among us with the best of educational influence.

But if I go on, I shall be tempted to fall into stories again. Let me simply say, in so far as I may, for the teachers of this great state of California, who have been looking forward with intense interest to this meeting, who have been pulling together — state, county, and city superintendents, the individual teachers in the ranks, assistant state managers, and friends of education generally — to make this meeting a success; let me say that all of us unite in bidding you, as frankly and heartily and earnestly as we know how: Welcome to Los Angeles!

HON. FRED EATON, MAYOR OF LOS ANGELES

Mr. Chairman, Ladies and Gentlemen:

Our state superintendent has given you all our valleys and rivers, our oranges, and about everything else we raise down here in the south; and about all that is left for me to give you is the right of way thru the city. I think I am perfectly safe in giving you that, because Professor Brown said you were all angels. Of course, we know what angels are — our kind of angels. I hope you are all of the same kind, and that you won't all flap your wings and fly away too soon.

Now, ladies and gentlemen, we are really glad and appreciate very much that this organization decided to hold its convention in this city. We know better than anyone else the real advantage of this convention to ourselves. Our people are never so much in their element as when they are surrounded with lots of company. We like company. We are out here to enjoy ourselves. That is the principal part of our business.

Our people take a great interest in educational matters. I think our schoolhouses here are evidence of that fact. We are just now preparing to vote $420,000 to increase our school accommodations, which have never been up to the requirements of this community, owing to the rapid growth that has taken place in this city during the last ten years. The city has grown since 1890 from 50,000 to about 115,000 or 120,000. So you see, with all the other municipal improvements, it has been hard for us to keep pace; that is to say, in quantity; in quality we are all right. Our principals here are up to the standard, I believe, of any place in the country. This does not reflect at all upon you folks who come from other parts of the country. I have that information from some of you; I don't know

much about school business, and am relying upon the opinion of these people who have come from abroad that we are all right on schoolmasters.

Now, there is a material side. We know that no people coming to this city will do us more good than you will; provided, however, that we make you go away from here feeling pleased. And it is our whole aim to make you enjoy yourselves while here. If we accomplish this, we have laid up a whole lot to the credit of our future. You know we are inclined to deal in futures a good deal in Los Angeles. That has been the principal business here ever since the boom. But we have a sure future, as the whole community is engaged in storing up good opinions for Los Angeles with everybody that comes here, and it is going to result in building up this city and the surrounding country.

We occupy an isolated position here in the United States with reference to the market, as you all know. You passed over several hundred miles of desert east of us that is very sparsely populated. We have a great expanse of ocean west of us, which has no commerce to speak of that touches this point. There is nothing out there but suckers, and, of course, we don't invite suckers here. Now, the good opinion we are laying up is going to be the means of building up this country. You see, unless we have a domestic market to rely on, we cannot engage in manufacture, even to the extent of our own necessities, because we cannot compete with the East. The freight rates are too expensive across this expanse of unproductive country over which the railroads have to transport our goods. The only thing we can raise to ship you folks in the East is something you cannot raise yourselves, such as oranges and fruits of other kinds. But we must have manufactures. We have all the native resources here. We have a greater variety of natural resources in the shape of minerals within a short distance of this city than any other city in the United States. But we must have railway communication, and first we must have the people. When we get the people we will have the railways built and these resources developed. So you see how we are interested in a material way, aside from the fact that we want to have a good time with you.

That is the first consideration. We want to have a good time with you, and we intend to have it. I want you to feel, ladies and gentlemen, perfectly at home in this city. Consider that you have the freedom of the streets and parks, and everything in town, and just go wherever you please.

J. A. FOSHAY, SUPERINTENDENT OF SCHOOLS, LOS ANGELES

Mr. Chairman, Ladies and Gentlemen:

We extend to you a hearty greeting on behalf of the teachers and friends of the educational interests of Los Angeles. We hail the presence of this vast body in our beautiful city as a token of increased zeal

and activity in the great cause of education. We welcome you as the representatives of a work which ranks first and is the noblest of today. We who are so far from the great centers, but who have eternal spring and healing air to compensate us, greet you as bringing to us the wisdom, experience, and latest thought which are being contributed to the educational world.

At Milwaukee in 1897, and at Washington in 1898, it was my privilege and pleasure to present the invitations from California and our city, asking you to partake of our hospitality. Our people were glad to have you accept these invitations, and began at once to make preparations for your reception. Many different estimates were made of the number we must entertain, and in order that there might be no question of our ability to care for the large number, we added to our territory by annexing Garvanza on the northeast and University on the southwest. Now, with our forty-eight square miles of territory, our hospitable homes thrown open to you, our spacious parks, and the assurance that no rain will fall, on the just or unjust, during the vacation months, we feel that we have plenty of room for you.

Los Angeles has an excellent corps of teachers, one of the best normal schools in the country, private schools and colleges, and a public library which is a prominent educational factor for the training of her 28,000 children. We regret that our schools could not be in session, so that you might see our work in progress; but we have prepared an exhibit of work which may be seen at the Spring street school building. We have learned that the whole child must be educated; the eye must be trained to accurate observation, the hand to deft manipulation, and thus call into action judgment, attention, comparison; in short, we accept Plato's idea of education, which is to give to the body and to the soul all the beauty and all the perfection of which they are capable.

The teacher is proud of his noble name. The great master Agassiz would be called by no other. And you who have come from the North, the South, and the distant East, who have taken the time from your vacation to come here and discuss methods and inquire how to increase the teaching power of our country, show your interest in your profession. The thought of training the minds and bodies and molding the characters of the coming generation seems at times overwhelming. Today you are planning and working for the future which must shape the destiny of our nation. Your work is great; there is no greater.

A story is told that Jupiter offered the crown of immortality to the one who had given the greatest service to mankind. Different applicants claimed the prize: first the soldier, then the historian, the poet, the priest; and last of all came one who said: "I have nothing to offer, but these are my pupils, and I am their teacher." "Crown him," said Jupiter, "crown him with the laurels of life."

I presume you have changed your minds in regard to our location as compared with that of Chicago, Boston, and New York. We are accustomed to think of the distance, and not of the time. Many of the older people of our city came across the plains, and it required six months to make the journey. Many of you have just made the same distance in less than six days. Chicago is only sixty-six, New York eighty-nine, and Boston ninety-two hours from Los Angeles. The telegraph and telephone bring your homes and cities in close communication with us; remember this fact, and instead of writing your letters to eastern friends, use these agencies or dictate your letters to the typewriters, and so save your time to attend the meetings and enjoy the many receptions and excursions we have prepared for you.

We are anxious to hear your discussions and receive your recommendations regarding the vital issues of our schools; and in order that we may retain them in permanent form for every teacher's desk, we have given as many memberships from this city as there are teachers.

As the large reservoirs of our mountains give forth their water in the warm, dry summer, to refresh the productive orange groves of California, so may this meeting of the largest educational organization in the world pour forth its influence to strengthen and invigorate the intellectual forces of our state; may it enrich the home life of the ranch, the school life of the pueblo, the college life of the universities of this, the Golden State of the far West! You are welcome to the far West, to the Golden State, to the City of the Angels, to our hearts, and to our homes!

RESPONSES

NEWTON C. DOUGHERTY, SUPERINTENDENT OF SCHOOLS, PEORIA, ILL.

[STENOGRAPHIC REPORT]

I am glad, indeed, ladies and gentlemen, to meet with this great National Educational Association as it gathers for the second time upon the shores of the sundown seas, and to become for the time being a citizen of these Islands of Delight which your own Professor Barnes depicted in such glowing language to us at Buffalo four years ago. We thank you for these kind words of welcome which have been spoken by your representatives of this great state and of this magnificent city.

When we met on this coast a decade ago, you were the great western empire of our nation; but as I glance over this program I am reminded that today there are islands west of us and northwest of us and southwest of us, over which the flag of our nation floats and to which we must carry the blessings of popular education and of free institutions.

We are glad, indeed, to meet again in this great state, whose educational institutions are the peers of any in our country; we are glad to enjoy your wholesome and invigorating climate, and to see on all sides the evidence of your prosperity. What a busy hive of human industry you have become! Whithersoever we turn we see evidence of your development. We behold streaming in the air the black pennon of the mighty locomotive, bearing across mighty mountain ranges the glorious fruit of your soil to our own people in the far East, and even to those beyond the sea.

And as we see all this, there wells up in my heart, and I think in the hearts of all those here, thanks to God that our fathers back in '47 were such expansionists that they saved this great empire to the Anglo-Saxon race and to Anglo-Saxon civilization. That race has had in its veins the blood which for more than a thousand years has nourished the hearts of conquerors and subduers. It has never surrendered before hostile man or forbidding nature. It has never acknowledged any superior save Almighty God himself. It has kept open the avenues of knowledge to all its children. It has been anxious that its children should be members of that empire which comes not by numbers nor by physical power. It has had for its highest ideal the transmuting of material wealth into the fiber of heroic men and heroic women. And so we thank God today that this great commonwealth of California is under the dominion of Anglo-Saxon civilization and of the Anglo-Saxon race.

We are here as the representatives of 350,000 teachers, who are engaged in the great work of saying to the youth of this land that wisdom is above rubies. We are, of course, expansionists as educators. We feel that there is illimitable room upon all sides before we can touch the boundaries of knowledge. During the past fifty years we have expanded the old curriculum of our colleges from four years into such courses that now it would require sixty years, if you take them all. We have taken this great association, born as it was for the elementary school of the city, town, and country, and have united with that the college, the university, and the kindergarten; so that today its representative is the representative of all educational culture and of all educational work.

We come here, ladies and gentlemen, in order that we may have kindled within us aspirations for the highest scholarship. We come here to gaze upon the treasures of wisdom until we recognize nothing worthy in ourselves save the dream, the thirst — "the wild desire, delirious, yet divine, to know." We come seeking that knowledge, that culture, that power, which will make us worthy members of the noblest profession on earth. We wish like Moses to be carried up, during this week, into those heights where we may look out broadly over the land and forget our vexations, our trials, and our troubles. And we are not unmindful that we meet in one of the most beautiful cities in the world. We are

not unmindful that the material wealth of this city is surpassed only by the educated heads and hearts and hands of her own fair sons and daughters. As we look down these magnificent avenues, as we see these cultured homes, as we look into these noble churches, as we see these great public buildings and this great public-school system, we know that California and Los Angeles have been true to the Anglo-Saxon idea of transmuting material wealth into spiritual power, and of worshiping the things which cannot be seen rather than the things which are seen. We realize that we are among those who stand for all that is noblest and truest and best in humanity, and we thank you once more for your kind words of welcome.

EMERSON E. WHITE, COLUMBUS, O.

Representatives of California and Los Angeles:

We receive with hearty thanks the words of welcome which you have so eloquently spoken. We fully realize that we are to leave the state your debtors. We are anticipating professional revelations, and our spirits are open to your quickening inspiration.

Some thirty years ago I watched with interest the development of the school system of California. If my memory serves me, California was the first state in the union to adopt a graded course of study for its rural schools. I examined this state course of study with much interest, and especially the accompanying manual prepared by the state school department for the guidance of teachers.

While this early movement unduly emphasized the principle of uniformity in school administration — a principle that has everywhere been the source of serious evils in school affairs — the "California experiment," as it was called, inspired efforts in different sections of the country to provide graded courses of instruction for rural schools, resulting here and there in the adoption of town or township courses, county courses, and, more recently, a few state courses.

In 1872 the National Educational Association met in Boston, Mass. In arranging the program for that meeting, I desired to see California represented by its foremost educator, and so I invited Hon. John Swett to give one of the principal addresses. He kindly accepted the invitation and crossed the continent to render the service. In their appreciative notices of Mr. Swett's address before the association, the Boston papers referred to him as the "Horace Mann of the Pacific coast" — a high and fitting honor.

At the time of the centennial exposition, in 1876, California gave high promise of being one of the leading, if not *the* leading, state in school progress. My present information does not permit me to say to what

extent this promise has been realized. The impression of some educators at a distance — an impression due, it may be, to their ignorance — is that the leadership of California in public education has been somewhat sacrificed by an undue development of the state system and an over-organization of the principle of state uniformity. If this impression be incorrect, it is but another illustration of the fact that the brilliancy of early reputation often dims the luster of later achievement.

I am not wholly ignorant of the high professional spirit of California teachers, and their individual and organized efforts to promote the educational interests of the state. We shall all be happy to learn here on the ground how far the efforts of their voluntary associations and movements have vitalized the mechanism of the state system and resisted the grooving tendency of state uniformity. There is no school policy to be more resisted in a free state than the policy that enthrones the state machine in education — too often manipulated in the interest of party politics; that overrides the judgment and interests of individual communities, and reduces school progress to a dead-level uniformity — a policy that kills vital educational spirit by putting the more progressive communities into a lock-step with the laggards whose pace is only quickened by the spur of state authority and help. The weakness of uniformity as a school policy is most clearly shown in its demand for average measures and average results, as average courses of study, average school sessions, average teaching appliances (usually much below a proper average), average requirements for promotion of pupils, and so on to the end of imposed mediocrity. All that is needed to complete this dreary grind of averages, which possesses so many school systems, is a statutory mechanism that will fill the schools with mediocre teachers on average wages! It does not need the ken of a seer to realize that one of the greatest dangers that now threaten the American school is the sacrifice of its best possibilities to this Moloch of state and city uniformity.

Two opposing spirits are struggling to dominate American education — on the one side the spirit of mechanism and uniformity, and on the other the spirit of individual opportunity and attainment. True school progress lies in neither of these extremes, but in their harmonious correlation and blending. The vital conditions of fruitful progress in education are (1) the possibility of individual communities freely realizing their highest school ideals; (2) the freedom of teachers to teach according to their best judgment, conscience, and power; and (3) the wise subordination of the demands of uniformity and system to the interests and rights of pupils.

We meet at a time of wide agitation and sharp conflict of opinion in all departments of human thought and endeavor. The century is closing with a bold challenge of all existing beliefs and institutions, with even organized effort to destroy the very foundations, not only of present

social order, but of civilization itself. Even university chairs are confidently evolving from their inner consciousness a civilization in which no human being shall be better off than his neighbor, a result hitherto unrealized except by industrial conditions in which no man has anything which he can call his own — the hopeless equality of poverty.

Nor is the school escaping this flood-tide of criticism and assault. Partial and narrow theories of education are seeking enthronement as ultimate ends, and childhood's opportunity is too widely sacrificed to new theories of education. The feasibility of common courses of study, which make the school possible, is not only denied, but the value of the most fundamental studies is questioned, if the child has not inborn interest in them. Shallow philosophizing is burdening teachers with hobbies and fads. Amid all this clash of opinion and practice the schools are making hopeful progress; but the ark of public education needs to be steadied by sound policies and wise counsels.

J. H. PHILLIPS, SUPERINTENDENT OF SCHOOLS, BIRMINGHAM, ALA.

Mr. President, Ladies and Gentlemen:

I can scarcely hope to add anything to the eloquent addresses that have already been given in your hearing. Since your worthy mayor has given us the right of way thru your municipality, I think the majority of us are very anxious to utilize that privilege.

About ten days ago I sat in my distant Alabama home and wondered what I could possibly find to say in response to the probable welcome that California and Los Angeles would extend to us on this occasion. I assure you that to formulate in words a response to an imaginary welcome more than three thousand miles away is a sorry task, and I was forced to give it up in despair. Since our arrival in Los Angeles, however, things have somewhat changed. Ten days ago the one essential condition of the response was wanting — the expression of a California welcome. We have today looked into your faces; we have read your cordial greetings in your eyes; we have been thrilled by the eloquent words of a genuine California welcome.

The National Educational Association is not altogether a stranger in California. Those of us who had the pleasure and the privilege of attending the memorable San Francisco meeting in 1888, eleven years ago, have not forgotten California's idea of hospitality, and we felt no misgiving in crossing the continent again to partake of the royal feast you have prepared for us. I need hardly assure you, ladies and gentlemen of California and of Los Angeles, that we are truly thankful for what we have already enjoyed, as well as for what we are about to receive.

We have no flowers of rhetoric, no words of eloquence, into which to weave the gratitude and the appreciation of this great association, but we trust that our appetites, whetted by the long transcontinental journey, will soon convince you of the sincerity of our appreciation, should our words fail to do so. We have already shown our faith in your promises and in your hospitality by accepting your invitation to come to Los Angeles and to California, and we expect, while we are here, to prove our faith by our works. We are glad that we are in Los Angeles. We have looked forward for several days with pleasing anticipation toward Los Angeles. To the weary, way-worn pilgrim, traveling from afar over the deserts and across the mountains, it was a great comfort and a source of reviving strength and inspiration to know and to feel that his destination was paradise — the City of the Angels.

For this glad welcome, I assure you, we are thankful. I beg to thank you on behalf of the teachers of this great country of ours, north and south, east and west; but especially do I wish to thank you on behalf of the teachers of that great section which I have the honor more immediately to represent; that land which you may call the land of the pine and ever-blooming flowers, if you will; but also the land of brave men and fair women; the birthland of Washington and of Lincoln, of Fitzhugh Lee, of Hobson, and of Joe Wheeler; the birthland of hundreds of heroes and patriots, whose names adorn the pages of our national history. The teachers of the South are already at home in Los Angeles, because they find here the orange and the vine, the fruits and the flowers, of their own sunny land, transplanted and flourishing in a climate as genial as their own. The teachers of the South are at home in Los Angeles, because they find here a new South, with resources as abundant and as rich as the old, inhabited by a people as true as they are brave, and as patriotic as they are limitless in their hospitality. The teachers of the South are at home in Los Angeles, because they feel at home always wherever the star-spangled banner floats in the breeze above them.

But, my friends, the teachers of this great nation, assembled now in Los Angeles, are not here simply to test your hospitality. They are not here merely for physical recreation and diversion. They are not here, moreover, in the interests of governmental imperialism, or of territorial expansion; but they are here to testify to their faith in the imperialism of the common schools of America. They are here in the interests of intellectual and professional expansion. They are here to counsel together and to discuss the most momentous question that can possibly engage the attention of any body of men and women on earth: how to develop the God-image in the soul of man. This, my friends, is the ideal of the National Educational Association. In upholding this ideal it does not, by any means, ignore the more practical and more immediate affairs of daily experience. The higher ideal in education does not necessarily

exclude the lower. This great organization stands today near the shores of the great western ocean, as it stood a year ago near the shores of the Atlantic, and heralds to the world the gospel of the free public school, the divinity of childhood, and the ultimate redemption of the race thru the agency of right education. This great organization stands here today in Los Angeles and re-echoes the words of the divine Master, when he said: "Whose image and superscription is this? Render unto Cæsar that which is Cæsar's, *but unto God that which is God's.*"

The restoration of the God-image in the soul of man, I repeat, is the high ideal of the National Educational Association of America. This is the divine mission and calling of the teachers of our great country. When we shall leave Los Angeles, when this meeting is ended, when we have enjoyed your hospitality, when we have listened to the great papers that shall be presented on this occasion, we shall return to our homes and carry with us higher ideals of life, of duty, and of country. We shall carry with us into the schoolrooms of this great land greater zeal, greater enthusiasm, and a larger faith in the possibilities of the American public school. We shall learn in California, not only lessons in geography, but lessons in patriotism as well, and we shall carry these high ideals of duty and of patriotism into our homes and our schools. We shall leave Los Angeles with our hearts attuned to the anthem of the angels: "Peace on earth, good will to men!"

JOHN SWETT, OF CALIFORNIA

Members of the National Educational Association and Fellow-Teachers of the United States of America, now, thank God, united, never to be divided again: I appear before you as one of the last survivors of the early educational circle in California. I have no doubt that the President introduced me as an awful example, an awful monument, of the conservatism of the past, and the antedeluvian condition of California years ago. I really don't know exactly where I belong. I was born in New England, and thought I was a New Englander. I lived there until I was twenty-one, and then I came to California, and have lived here fifty years. Last year I went back to New England again, and, altho I thought I had forgotten all about it, having been away so long, after spending three months there studying up New England history, I thought again that I was a New Englander. Then I crossed the continent, coming from one side to the other, and by the time I reached San Francisco I had been born again in California. Now, I only know that I must be getting very old. The other day, in Los Angeles, a bald-headed man said to me: "You don't know me, do you?" "No," I said, "I don't know you, I have never seen you before." "Oh, yes, you have," he said; "I went to

school to you." And I looked at him and said: "You must be mistaken." But he insisted: "When I was a very little boy I went to school to you, and then you were a very old man."

I am willing to be taken as an example of the early days in California. We worked hard, but we were ambitious. We had a good time. A good many of us came out here expecting to make our fortune in the mines. We didn't. And then we turned in and did some pretty good work in the public schools.

It gave me great pleasure to hear from Dr. White, who represents the state of Ohio. He gave us a statesmanlike paper, and we ought to thank him for the words of wisdom and caution he has given us here today. There is a growing tendency toward state uniformity and state centralization, which, if continued, would make our people a sort of Californian Chinese. I have no love for the uniformity of the Chinese empire. I came originally from New England, and so did Dr. White's ancestors. They went out west, and he grew a good deal taller than I did, because he had more to eat out there. But the old principles of personal, individual responsibility and democratic love of individual freedom sticks in his blood, and will as long as he lives. And I trust it will remain in mine until I cease to breathe, and return to the Mother Earth of California.

I will not take up your time further; but if the President of this association thinks that I am going to disappear from the National Educational Association because I belong to the age of Methusaleh, he is altogether mistaken. You will see me again and again, whenever I have money enough to cross the continent to attend the sessions.

ADDRESSES

PRESIDENT'S ADDRESS

BY ELIPHALET ORAM LYTE, PRINCIPAL STATE NORMAL SCHOOL, MILLERSVILLE, PA.

The National Educational Association, which assembles this week in the beautiful city of Los Angeles, was first called the National Educational Association in 1870, at Cleveland, O. Previously to that time it was known as the National Teachers' Association. This body was organized in 1857 in Philadelphia, with an enrollment of thirty-eight members. Its first annual meeting was held at Cincinnati in 1858, and at the opening session there were five members present, but these five were greeted by a large audience, and the membership subsequently reached seventy-five. The growth of this organization may be seen by comparing this number with the enrollment of more than ten thousand at Washington last year. In other respects also great progress has been made. The first constitution of the association provides that any gentleman regularly occupied in educational work shall be eligible to membership, and that ladies engaged in teaching may become honorary members, and thus possess the right to present their views in writing, so as to be read by the Secretary or some other regular member. Today there is no sex in the constitution of the National Educational Association.

The objects of the National Educational Association are stated in the preamble to be : to uplift the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States. These objects the association has never lost sight of. It has elevated the character and advanced the interests of the profession of teaching as no other agency has done. It has promoted the cause of public education, not only thruout the United States, but thruout the civilized world. The contributions to pedagogy made by this body fill many large volumes, and are of great and lasting value. No educational library is complete without these volumes. Within the past few years the work has been made more practical by several reports on schools of different kinds, that have served as guides to school officials in many parts of our country. These contributions have been made by some of the most prominent men in the profession of teaching in the United States, who recognize the National Educational Association as an organization to which they are proud to belong, and as the medium by which they reach large numbers of teachers. I do not wish to say that all the great leaders of educational

thought are members of the National Educational Association. That would not be true. There are educators of great promise who have never joined the ranks of this army. I do wish to say, however, that many of the great educators of the country are members of this association. The field of their labors has been widened by their becoming members, the numbers they have been able to reach are larger, and they have become greater in influence, and more potent factors in the solution of the educational problems of our country.

Fortunate it is for the youth of our land that there exists an organization which commands the respect of the wisest and greatest of the teachers of today; and that these men are willing to devote their time to the solution of educational problems that otherwise would remain unsolved. Many of these problems have been solved, and their solution has in many localities revolutionized courses of study and methods of teaching. Many await solution. Some of the unsolved problems are too great to be solved by an individual, and can be mastered only by the combined and continued efforts of a large body of teachers, located in different parts of our land, and filled with a common purpose to aid in the improvement of the schools of the nation.

It was my intention to say a word concerning some of the unsolved minor problems, relating especially to elementary schools, which, it seems to me, will shortly demand the attention of the National Educational Association. The lateness of the hour, however, will prevent me from more than briefly, and to a great extent extemporaneously, referring to one or two topics which, it seems to me, are of immediate interest.

A subject to which we might devote our attention with considerable profit is the subject that, for want of a better name, may be termed "continuation schools." All our elementary schools are necessarily intended for children. Public schools are conducted for children of school age, and not for those of a more advanced age. Persons with means for pursuing their work, or with a burning desire for knowledge, may be able to continue their studies in higher institutions, but the large mass of men and women practically stop their conscious education when they leave the schoolroom. Is it not possible for a plan to be prepared that could be put into practical operation in all our larger cities, and in many of our smaller ones, so that young men and young women who are compelled by circumstances to go to work to earn a livelihood would at the same time have the opportunity of continuing their intellectual work under proper guidance?

Of course, we all know that in most cities there are night schools, and many of them do considerable good; but often these schools are not organized so as to reach everyone, nor do they do more, as a rule, than merely give the dry elements of a common-school education. The young

person who has left school needs to have the opportunity of learning something about the work in which he is engaged; and he needs also to have the opportunity of wider reading and of continuing the literary culture which may have been begun before he left school. Young Men's and Young Women's Christian Associations are endeavoring, in part, to fill the place to which I refer when I speak of continuation schools. Why should not schools organized somewhat as Young Men's Christian Associations, but with a wider and more definite purpose, be established under state or city control? The great good that these associations do is apparent to all. Cannot we learn from the results that they have accomplished that there is a real demand for schools to do intelligent work, adapted to the needs of persons from twenty to thirty, or older? Still further, in every neighborhood, certainly in every large city, there are many isolated educational institutions, or institutions that are working toward a general educational end. There are lyceums, libraries, lecture courses, singing schools, farmers' associations, mechanics' clubs, established by individuals and working for the good of those belonging to them. Would it not be possible to have all these educational forces harmonized and directed, in a general way at least, by experts? The university-extension idea reaches out in one direction. Why should it not become a part of a general plan to direct in every way the education of a community? The success of the circulating library, when it has been intelligently tried, shows what can be done in another direction; while the Chautauqua movement, representing another phase of the question, has been the means of bringing culture and refinement and a taste for knowledge into the homes of thousands that would otherwise have remained, to a great extent, ignorant of many of the simple facts of history, literature, and science. It should be possible to prepare a working plan for the establishment of schools that would be within the reach of nearly everyone, and would be adapted to the wants and needs of nearly everyone.

May I say parenthetically that I wish that a body of teachers that are fond of athletic sports would consider the whole question of games and plays for the American youth of both sexes, and particularly for American boys? The characteristics of a nation are largely revealed in its sports. What sports that are enjoyed by the American boy tend toward manhood? To particularize: The study of baseball, in its effect upon the national life, would not be unworthy of the efforts of anyone; how it leads a boy to do his best and yet to yield to others, to make constant sacrifices for the good of the community — the nine he is playing with. To do one's best, and yet to help others to do their best — whatever demands this of a boy must have in it much that is educationally good. I am not entirely sure that the churches would not be benefited as well as the schools by a careful investigation of the games that have become a part of the life of the Anglo-Saxon race, and that appeal strongly to robust manhood. Christianity

is manly as well as godly. The Christ that wept at the grave of Lazarus is the same Christ that drove the speculators from the temple with a whip. He was brave as well as tender, and his bravery merits our imitation as well as his tenderness and love. To ignore the games which call for the exercise of bravery, even if they occasionally seem rough, is to ignore an element in human nature which is too strong to be subdued, and which should not be subjugated even if it were possible. Here is a field for the investigator which is but partly explored.

Not long ago our country was thrilled with a sudden burst of patriotism that proclaimed us one people, possessing the elements of a mighty military nation, peaceable because of our might, and unconscious of our real strength. Much as the Spanish-American war did for the struggling islands that were freed from the Spanish yoke, I have questioned whether it did not do more for our own nation in making it acquainted with itself and with its power to adjust itself to new conditions. What the National Educational Association has done to nationalize our country — to mold its heterogeneous elements into homogeneity — it would be impossible to estimate; nor can anyone tell what it has done to make peaceful progress the high object of our people. With us war is the unusual, peace the usual condition. It will be remembered by many of the older members of this audience that at the close of the Civil War, a generation ago, our armies, north and south, melted away before the sweet sunlight of peace, and the citizen-soldier of one day became the law-abiding soldier-citizen of the next day — an act unparalleled in the world's history. So it was last year; our soldiers became citizens without a disturbance of any kind. Our history has demonstrated that we have no need of a great standing army. It has demonstrated that in every school district may be found a company, in every township a regiment, in every county a brigade or division, in every state a corps, if not an entire army, ready at a moment's notice to defend our flag against every foe. And this army is not marshaled by military chieftains, but by educational chieftains. A strong nation is made, not by barracks for troops, but by schoolhouses for children; not by recruiting officers, but by schoolmasters; not by rifled cannon and Mauser bullets and war vessels, but by books and newspapers and churches. That nation is strong whose citizens obey the law without seeing a standing army behind the law. That nation is strongest whose laws are based on divine law, and whose citizens obey both divine and human laws because they know them to be right. A child obeys his teacher, who to him is the law. To the child law must be concreted. As the abstract is the result of a higher form of thought than the concrete, so a republic is a higher type of government than a monarchy. We may need an army to subjugate the Filipinos, but the United States would be distinctly lowered in moral tone if it should ever become necessary to maintain permanently within the states a great standing army to secure

to its inhabitants the blessings of peace. If this is true, how great is the responsibility of the American school-teacher! Patriotism is in the air; it is the normal condition of living under our flag. As a child does not need to be taught to think, but only how to think, so the American youth does not need to be taught to be patriotic, but only how to be patriotic; and this is largely the work of the schools. How well this work has been done let history answer.

Our horizon, however, is widening. Whether we will or not, the problem of carrying the benefits of our public institutions to the islands beyond the sea must be solved, in part at least, by the men and women of this association. Since the last meeting in Washington it has become plain that the great underlying influences that have made this nation the freest and greatest of the globe can no longer be bounded by the sands of the sea or the waves that dash against our shores. "Thus far shalt thou go and no farther," was not spoken to the schoolmaster. The hand of destiny points the way across the waters today as unerringly as it pointed the way for Columbus to cross the unknown seas four centuries ago. Let us protest if we must, but we must bear our share of the "white man's burden." While I recognize fully the right of others to disagree with me, I confess that I so thoroly believe in the institutions of our country, and in the dignifying influences that follow our flag, that I rejoice to watch the onward progress of our ever-conquering republic, and the triumphant march of the Anglo-Saxon race.

Some of the burdens we now assume are new to us. We have not stepped far beyond the land upon which our forefathers settled when they began the conquest of the wilderness; but the sea is no longer a barrier, it is no longer a trackless waste. It is a great highway on which we can convey the material and spiritual benefits of a Christian civilization to the benighted children of our enforced adoption. Cuba and Porto Rico are almost a part of our mainland, and the Philippines are much nearer the United States in this year of grace 1899 than were the fair lands that form the great western states of our union half a century ago. The bounding virility of the men and women that have made our land what it is will be needed in the solution of this newer problem, and it will be freely used in solving it. Are the schoolmasters ready?

It is not necessary for me to occupy your time further in suggesting what may yet be done by this organization. In the brief and somewhat rambling remarks that I have made I have purposely avoided referring to many of the greater educational problems which, under the general direction of this association, must be solved by our educational experts. These great problems force themselves upon us, and we cannot escape them. But the minor questions, of which I have mentioned one or two as somewhat typical, are likely to be overlooked, and it is for this reason

that I have briefly hinted at them. A full discussion of them would be out of place in this address and at this time.

As you all know, no effective work requiring the combined efforts of a number of men can be accomplished without organization. Organization produces system, demands economy of effort, and avoids waste of time and energy. An organization of schoolmen and -women makes it possible to have an effective school system. It strengthens the weak places of the system; it cultivates what is good and weeds out what is bad in the system. It develops individuality and promotes harmony. A strong organization like the National Educational Association makes each individual stronger and more independent of the influences, found nearly everywhere, that would use the schools for private ends and would sacrifice the teacher or school officials who resist the demands of the place-hunter and spoilsman. But it does more than this. This organization is a guide to a great body of teachers who are anxious to know what its members think and say. It molds the educational thought of communities, and even states. It is a source of inspiration to our fellow-laborers in every department of educational thought, and it brings dignity and permanency to the vocation of teaching. To the meetings of this organization it is my duty, as President, to invite you. Every effort has been made to prepare a program that would represent the leading educational questions of the day and all sections of our great country. Let us trust that the present meeting, held in this charming place, may make its influence felt in every section of our land. May it catch something of the sunlight of this land of sunshine, and aid in carrying the divine rays of a useful education into every community of every state! If this is accomplished, the object of this meeting will have been accomplished.

AN EDUCATIONAL POLICY FOR OUR NEW POSSESSIONS

BY W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION

Each nation has had its own policy with regard to the management of new territory acquired by war. The conquests of Persia destroyed the military power of the subdued peoples, but left them their manners and customs, their industries and laws. Even when, as in the case of the Jews, a too stubborn nation was transported to the Euphrates, its essential traditions were not much changed by the Babylonians. But the Persians hastened to send back the captives whom they found weeping by the waters of Babylon, and a new temple was soon built in Jerusalem.

The Greek conquest of Alexander shows the same toleration of religion and of manners of life, altho Greek science and learning took the place of the previous intellectual life thruout eastern Persia and Egypt.

But the Roman conquest meant something far more thoro. The people of Europe, Asia, and Africa who yielded to Roman legions were compelled to change, not only their political forms, but their administration of justice; even their religious worship and their family and tribal forms were changed. For their gods were carried off to Rome and placed in the Pantheon, to be worshiped henceforth as gods of Rome and no longer as the protectors of their own people. The subjugated people had to send to Rome to make offerings to the gods whom they had looked to for their support, from generation to generation, thru untold ages. The consequence was the necessity of loyalty to Rome on the part of conquered peoples, because of the fact that Rome had become the custodian of their gods.

But Rome had another hold upon its new possessions. It conscripted the young men of a province as soon as it had obtained control over it, and sent them into the ranks of the army to fight for Rome. But it did not make the mistake of leaving the conscripts where they could lead a revolt and assist their people to recover their independence. It sent the new conscripts to some far-distant frontier, where their safety depended upon their loyalty to the legion in which they were placed. Only by loyalty to Rome could they expect ever to see again, or even to hear from, their dear ones in the family left behind in the native land. Thus young men from Gaul and Britain, from Spain and Germany, were sent to frontiers of Egypt and Greece, Parthia and the Nabathean wilderness, to serve in the armies of Rome; while on the other hand the young men of the East were sent to the West to hold in subjection the peoples of Spain, Britain, Gaul, and the Rhine.

This was an education in cosmopolitanism — the mixing up of nations by means of the Roman army.

But Rome had still another and a more important education for its new possessions. It set up everywhere its prætorian courts, and, in the place of violence or mere princely authority, brought forward principles of jurisprudence openly promulgated before all men. There was the Roman advocate who would take advantage of all the subtleties of the law to get for his client a favorable verdict. The prætor had in the main to decide in such a way as to secure justice. The civil law was established by countless prætorian decisions, and has become the priceless possession of all modern civilization. The nations conquered by Rome and held for one or two centuries learned to live under Roman laws, and could never after rid themselves of that necessity.

The Roman taught each individual of his world-empire a twofold consciousness: first, of his right to the acquirement of private property in land, and his right of protection by the courts in his property and in his person against violence; secondly, his duties as citizen to support the state by risk of his life and property.

This was a training in individualism, and at the same time in citizenship, so that Rome may be said to have made individuals into persons in a way that had never before been known.

Charlemagne finished the work of Julius Cæsar in the conquest of the Teutonic tribes by a thirty-years' war with the Saxons. The states of modern Europe are governed substantially by Roman law, but they do not adopt, without important modifications, the Roman policy with their new possessions. To be sure, they all seek to obtain a revenue by taxation or otherwise from the conquered province, and this is right so far as it goes to pay the expenses of a just government and for institutions established for the enlightenment of the people. New possessions in farther Asia, central and southern Africa, or in the islands of the Pacific are also initiated into the Roman jurisprudence in its latest development. More than this, they are made acquainted with the arts and inventions for use, comfort, and luxury, and with science to a greater or less degree. In fact, up to a certain limit there is an altruistic attempt to lift the people that do not possess the arts of life into civilization, at least so far as the conquest of nature for food, clothing, and shelter is concerned. And the missionary movement of the Christian church is unremitting in its purpose to enlighten those people in the matter of the divine destiny open to all men to whom is revealed the doctrine of the divine-human nature of God.

To the United States, as a nation proclaiming freedom and equality to all men, one looks for a new step in the general direction taken by civilized Europe with its conquests. One expects more altruism, more government of the people for the benefit of the people.

It is a strong presentiment of this that has led to the party of opposition which declaims against imperialism and sees no just road to the acquisition and government of territory that is not inhabited by people that have reached the stage of self-government, and capable of becoming independent states in our union. Notwithstanding a quite general adherence of our people to the principles enunciated in the Declaration of Independence, there is almost equal distrust in the practice of admitting into the union any people who are not fully ripe for self-government. This means that they shall have arrived at a sense of fair play and tolerance for those who differ in opinion, and, besides this, a ready submission to those legally in authority. It means, moreover, that there shall prevail among the people of the new possessions a conviction that leads to productive industry and to the creation of an enlightened public opinion. Would any of our cities allow its slums to vote, and thereby lower the standard of righteousness in the community, if it were not for the fact that it is believed that the privilege of voting is in itself an educative force in the state, and that it constantly increases the self-respect of the voter? It is feared by the opposition that the restriction of the

right to vote will end by creating a social barrier obstructive to the development of humanity. It has seemed, therefore, to be a new departure for the United States to acquire colonies that must not be admitted to federal representation. It must involve an imperialistic relation to a portion of our people, and this will gradually react on our form of government, and in the end deprive us of cherished privileges.

We see, however, that expansion is unavoidable in some form. The great powers of Europe have divided Africa among themselves. They have moved upon Asia, until it seems only a question of months when China, the greatest aggregate of people with an indigenous government that has ever existed, will be partitioned. There is no territory of uncivilized people that will remain long out of the possession of these great powers. Nor is there a long future for any of the decaying political powers, wherever they may exist. This fact causes every thoughtful American to look seriously to the question whether it is not a duty devolving upon us as a people to have our hand in this work of division and show that we can hold conquered nations for their own benefit — that we, in short, can lift them toward self-government.

Other nations, notably Germany, Austria, Russia, and France, will teach their colonists to be industrious and to adopt civilized habits in the matter of food, clothing, and shelter.

Great Britain will go farther and establish universities in India, and even in Africa, so as to permit exceptional individuals to reach great careers; but the United States will put before the whole people the opportunity of schooling. It will give whole nations an apprenticeship in an industrial civilization. Is not this better than to draw a Chinese wall around our present territory and make no new acquisitions, on account of the danger of diluting our already thin national blood? Let us have an apprenticeship for all people within our nation in the art of local self-government. In this, then, is hope, not only for peoples on a lower stage of self-government, but also for ourselves. For if the other people of the world, to the number of some fourteen hundred millions, are united under the five great powers of Europe, while we, in turn, have only one hundred millions, our national idea will be threatened abroad and have more dangers than ever at home.

And, again, it is absurd to suppose that, if our democratic government of the people comes to have under its protection people who are not equal to the task of self-government, it will be necessary for us to tyrannize over them and enrich ourselves on their substance, cruelly neglectful of their best interests.

We must accept the charge of as many of these colonies as come to our hand. We must seek to give them civilization in the highest sense that we can conceive it.

Meanwhile, what is civilization? And who are we that feel so

satisfied with our own form of living that we dare to wish it imposed on other people?

What right, it is asked, has one nation to impose its forms on another by force, on the ground that it is a higher form of civilization? What infallible criterion have we, asks another, by which we may be entitled to conclude that we have a higher civilization than the neighboring nations? Why is not the Indian civilization as good as ours? Why is not the Chinese civilization or the civilization of the Philippine Islands as good as the civilization that calls itself the United States, or Great Britain, or France, or Germany? This is a serious question, and needs to be understood if one is going to sit in judgment upon national achievements.

Let us consider the answer which can be made to this question: What is it that makes one civilization higher than another? What is a high civilization, and what is the highest civilization?

Let us pause and consider a definition of civilization. For we must have such a definition that its bare statement will lead to its instant adoption. It must be clear on the face of it. Such a definition, too, cannot fail to help us as to the kind of education which we must give to the people of our new possessions, if we accept the responsibility.

I offer as such a definition the following:

A people is civilized when it has formed institutions for itself which enable each individual to profit by the industry of all his fellow-citizens; when it enables each individual to profit by the experience and wisdom, the observation and the thoughts, of his fellow-citizens; when it encourages each individual to enter upon a rational self-activity by which he contributes, either thru his industry or thru his observation and his thoughts, to the benefit of the people with whom he lives.

This, too, will apply not only to the highest forms, but it will indicate the degree of advancement all along the line, from the lowest grade to the highest. If one nation allows one-half of its citizens to grow up illiterate, and in consequence not able to profit, thru means of books, by the experience of the race, nor enter into the thoughts of their fellow-citizens, that nation is surely inferior to another that gives these privileges to three-fourths of its people. So, too, a nation that can earn only twenty cents per day for each inhabitant is inferior by so much in its civilization to the nation that can earn thirty, or forty, or fifty cents a day for each.

But this definition can be stated in a more technical manner to bring out all that it contains.

Civilization enables man to conquer nature and make it his servant; to command the services of heat, light, electricity, and of all the inorganic elements; to command the plant world or vegetation for his uses; to command also the animal kingdom for the same service; in short, to command the services of nature for food, clothing, and shelter. Besides this control over nature, civilization should give man access to the

history of his race; access to its literature; access to its scientific discoveries; access to its various inventions; and, above all, access to its moral and religious ideals. Civilization, in short, should give man command of the earth, and likewise command of the experience of the entire race.

This shows the goal ahead of us, and not merely our partial realizations.

In the light of this definition we may approach the civilizations as they actually exist, and inquire how far they have realized the ideal, how high they have climbed on the ladder of civilization. At once we see how low the tribal civilization is as compared with the civilization of Great Britain, or France, or Germany. There is no tribal civilization on the face of the earth, and never was one, which could compare with these nations in its knowledge of the uses of minerals, chemical substances, and the natural forces, such as heat, light, electricity, gravitation. No tribe can possibly command the complete resources of the world as regards its vegetable and its animal life, the products of agriculture and the mines. The reason for this is that the tribe is too small, and the tribe, from the very nature of its constitution, cannot co-operate with other tribes or receive their help. It stops at a view of nature which is a mere superstition. The tribe can climb only a little way up the ladder which leads to the control and command of all the substances and forces of nature. Consequently the tribe cannot participate, to any great degree, either in the productive industry of the whole world or in its intellectual investigations and discoveries.

Other forms of civilization above the tribe take rank as higher or lower, according to the degree in which they realize this ideal of conquest over nature and complete intercommunication with the rest of the world. No nation that lacks a great commerce can be so high in civilization as Great Britain or France. No nation that lacks railroad communication can be so high in civilization as the United States. No nation that lacks steam engines to perform its drudgery can be so high as the nation which has these things.

Hence it is obvious that we and all other nations were a century ago far below what we are now on the material side of our civilization, and if we are no worse off than then in the matter of spiritual communion with our fellow-men, then we are higher in our civilization as a whole.

A nation that has no printing presses, and that cannot buy or read the books of the world, cannot be said to have a high civilization. And on this scale the nation that has the most printing, that makes the most books, and that reads the great books of the world, is higher than the other nations. The ideal in this respect is that civilization should make it possible for each man to know the experience of all the past thru science and literature, and that he should be able to see, thru the

columns of a morning newspaper, history as it is making day by day in all the lands of the world.

It is a surprise to us all to consider the enormous advance made in a hundred years in this matter of knowing what all humanity is doing. We could know, in 1799, much of the great world-history before it was half a year old, but not nearly so much as we can now know within six hours.

There is another criterion by which to try a civilization, and it is a very important one. A nation may be very far advanced in its ability to control nature and to command access to the wisdom of the race. But it may do this only for some classes of its citizens and not for all. Such a nation is not so highly advanced in its civilization as one that allows each of its citizens to participate in the product of the whole. The nation that gives schools to the humblest classes of its people as well as to its highest classes, and the nation which allows the humblest people to govern themselves under just laws, is a higher nation than one which separates the ruling class into a government apart from and above the mass of the people.

The highest ideal of a civilization is that of a civilization which is engaged constantly in elevating lower classes of people into participation of all that is good and reasonable, and perpetually increasing at the same time their self-activity.

Pursuing this same line of thought, we must note that with the increase of individual self-activity along the lines of science and productive industry, there is an increase of creature comforts to each and every inhabitant, as well as increase of his ability to enjoy spiritual intercommunication by means of books, magazines, and newspapers.

I am aware that many persons think that an industrial civilization devoted to money-getting and the accumulation of capital is a spurious civilization, and that it is a lower stage of human society than the tribal stage and the village community. This is the reason why I am explicit on this point of the importance of man's conquest of nature. For without this machinery for the creation of wealth, and without the combination of individual savings into vast masses of capital, there would not exist, as there does now, a bond of commerce extending around the world and uniting all peoples. For this material bond must exist before the spiritual interaction can exist which makes each nation participant in the experience of all others.

When we look at the accumulation of wealth and the combinations of capital, we must see how essential they are to the conquest of nature. The inventions of any one people are converted by means of commerce into an active help to all other peoples. The ships of the commercial marine of Great Britain help to cheapen the cost of the productions of all nations to each consumer.

The capitalist who invests ten millions of dollars in tenement houses in any city helps all of the citizens of that place to obtain better

dwellings at cheaper rents. The capitalists who build railroads lower the prices of freight, and in doing this add something to the wealth of the distant producer as well as cheapen the cost to the consumer.

The amount of money earned on an average to each inhabitant of a state measures its rank of civilization, so far as the conquest of nature is concerned. A nation that does not use machinery and steam engines cannot afford for all its people a full participation in the world's market. A nation like the English that commands the most machinery will command the most comfort for its people. Thirty families out of a hundred in Great Britain report an income of one thousand dollars and upward, while only three families in Italy out of each hundred report the same amount of income.

Side by side with the conquest of nature, as we have seen, develop the two classes of knowledge, the knowledge of nature and the knowledge of man. The mining for silver and iron, and the other metals, is not the only kind of mining. Civilized man is mining continually into the history of peoples, excavating buried cities and exploring their monuments and the remains of their literature, and trying to discover what motives governed the civilizations of the Nile valley and the Euphrates, and learn what was the nature of the institutions with which the people of the past governed themselves. This spiritual method of mining brings up to light human life as it was in the past, and more and more every day we come to understand how civilization has been evolved out of savagery. We can understand better and better what is our real status in our progressive development toward the ideal of civilization. And we can understand better and better our shortcomings. We can see the ideal far above us and beyond us.

If we cannot come into contact with lower civilizations without bringing extermination to their people, we are still far from the goal. It must be our great object to improve our institutions until we can bring blessings to lower peoples and set them on a road to rapid progress. We must take in hand their education. We must emancipate them from tribal forms and usages, and train them into productive industry and the individual ownership of land. We must take them out of the form of civilization that rests on tradition and mere external authority, and substitute for it a civilization of the printed page which governs by public opinion and by insight rather than by mere authority. Such a civilization we have a right to enforce on this earth. We have a right to work for the enlightenment of all peoples and to give our aid to lift them into local self-government. But local self-government cannot exist where there is no basis of productive industry and book-learning.

Here we have the answer to our question: What is the right one civilization has to substitute itself in the place of another form of civilization already existing?

We have read with great interest the new and higher definition of the "white man's burden," as stated by the greatest of living poets. The white man proves his civilization to be superior to other civilizations just by this very influence which he exercises over the peoples that have lower forms of civilization — forms that do not permit them to conquer nature and make the elements into ministers of human power; forms of civilization which do not sum up for each individual the ideas of all mankind thru all ages, but, rather, which limit him exclusively to the experience of his own tribe, and which fail to give him an understanding even of that.

Let us suppose that, in particular, we, the people of the United States, agree that it is our burden to take up the education of the people in our new possessions. We shall also agree that there are two lines of education — one in productive industry, and one in letters and science. Our definition makes it clear that the school is to be a great feature in the government of the new possessions. All the inhabitants must be educated, and not the few alone. There must be opportunity for all, not only to learn letters in school, but also to learn the trades and commerce and agriculture.

That education should be such as to enable the inhabitants to develop to the full the resources of their islands.

So much being settled in advance, we may now make a few specific inquiries as to the first step to be taken. In all these new possessions there have existed school systems, or at least the rudiments of such. That of the Hawaiian Islands has been so wisely and efficiently organized that it needs no help from the outside, and I do not speak of it in what follows.

It seems to me that there are three simple steps in the inauguration of an educational scheme for Cuba and Porto Rico.

First, I take it for granted that the government will leave the management of the islands for several months, or even years, in the hands of military commanders who will govern thru provost-marshals assigned to districts — these being instructed to take all proper steps to interest substantial citizens, citizens possessing educated intelligence or successful in the management of property, to come forward and assist in restoring social order and in re-establishing schools and business in the proper channels. By a gentle pressure on the part of these provost-marshals old schools could be re-established and perhaps new ones opened. It is important that the United States government should do something as soon as these schools have been reopened, namely, it should furnish supervisors to visit these schools and suggest improved methods of instruction, giving the teachers of these new possessions the benefit of the experience in the United States that has accumulated during the many generations that our common-school system has been in operation.

The supervisors should consist of one general superintendent of schools and a sufficient number of assistants to make possible a weekly visit to each of the schools on the island.

In the next place, something should be done with regard to the instruction of the natives in the English language. Great care should be taken not to attempt too much. If the United States government should employ teachers of English (and these must all be acquainted with the Spanish language) to make weekly visits to the several schools and give model lessons in instruction in English and direct the instruction in this branch, one lesson a day being required in each of the schools, the native teachers would soon become good instructors in this branch, and the English language would very soon come to be taught in an effective manner, and this with a minimum of outlay from the public funds.

After the military rule, of course, civil rule must come. Indeed, it should be the policy of the government to make the military rule a system of nurture to develop civil rule and self-government on the part of the people of these possessions. While the military rule lasts, it will give opportunity for the national government at Washington to become acquainted with the peculiarities of these islanders, to learn their strong points and their weak points, and, so to speak, acquire a fund of experience necessary for the formation of proper civil codes and the organization of a system of government for them.

It is evident that the first step on the road to prosperity must be the re-establishment of the various industries and civil vocations of the people. The establishment of schools should proceed step by step with this settlement of civil and industrial vocations, so that the youth growing up may understand the rationale of the things that they practice; and when they grow to manhood and womanhood they will be qualified to enter into a new order of citizenship, which our national government will hope to encourage and succeed in bringing to a vigorous maturity in these islands.

To summarize these outlines of an educational policy for our new possessions: They involve, first, the action of provost-marshals, under the direction of the generals commanding these islands, to re-establish in their old channels the industries and the educational institutions; secondly, the appointment of expert supervisors to inspect the schools and train the teachers in the most advanced methods of instruction; thirdly, the appointment of Spanish-English teachers who are able to lay out a course of instruction in English and introduce it into the programs of the schools so as to have in all cases one lesson a day in English, and to supervise the teaching of this work as performed by the regular teacher of the school. Under this arrangement both teachers and pupils will very soon attain a considerable familiarity with English.

It is all-important that only one lesson per day should be given in English. More than this would be liable to the suspicion that we desired to substitute English for Spanish in our new possessions, and such suspicion would embarrass, and even render futile, all our efforts at improving their schools.

The experience in Porto Rico since January of the present year has been very nearly on these lines, and has met with success. General John Eaton, my eminent predecessor in the Bureau of Education, has been the chief executive officer in the educational department of Porto Rico, and has latterly had one assistant. The able general in command of the department (General Henry) supported his policy and made it possible, not only to revive and continue the schools of the island, but also to establish new ones. No adequate provision has been made for many years in that island to pay the teachers' salaries, and this was one of the first evils that met a remedy. The revenues of the island collected by the United States are to support the teachers and the supervisors. But one assistant superintendent is not enough. There should be a corps of assistants sufficiently large to visit each of the schools weekly.

Besides the literary work there should be, as I have suggested, schools of industry, with special teachers, in every considerable town and village. The general manual-training school, as it exists with us, would do good work there, but I think that special trade schools are better. They should fit all who desire instruction for their special vocations.

In conclusion I refer once more to my extended discussion of the new duties which devolve on our nation at this epoch — when it becomes responsible for new territories whose people have been brought up under older forms of civilization. It is our duty to make a system of education that will develop in their people an ability to conquer nature and to enter into an all-sided spiritual communion with mankind.

THE EDUCATIONAL PROBLEM IN HAWAII

BY HENRY S. TOWNSEND, INSPECTOR GENERAL OF SCHOOLS OF HAWAII

While deeply appreciating the honor of an invitation to address this assembly, I have not for a moment allowed myself to consider it a personal matter. The invitation came to me as a representative of the educational workers in one of the nation's new possessions; and as such a representative I thank the President for this honor and this opportunity. I assume that the President and this assembly desire to hear about educational questions connected with Hawaii, rather than the thoughts of an Hawaiian educator on the more general questions usually discussed at such meetings.

The very existence of a science of education presupposes that minds in general develop in accordance with certain fixed and ascertainable principles and laws. Yet the very first and most important principles of the science imply that no two persons can develop alike. No man can think again the thoughts of Homer or of Shakespeare, in all their completeness and all their limitations, since no man has the environment or the temper of either. In like manner it follows that no two persons can think or feel or will alike; and hence, that no two can have exactly the same course of development. Yet great sections of the world's population, having developed for many generations under the influence of similar environment, animated by similar incentives, and struggling thru common difficulties toward common ideals, are comparatively homogeneous. Thus different races and different localities come to have their own peculiar educational problems — corollaries, as it were, of the world's great educational problem.

Before proceeding to discuss the peculiarities of the problem which confronts Hawaii, it may be well to spend a moment considering this great general educational problem. It may be granted that the great end of all institutions is the highest possible development of the individual — that education, social and political organizations, and even the church of God on earth, are but means of this one great end, the development of the finite in the image of the Infinite, of the relative in the likeness of the Absolute. Yet it has been established that "no man liveth unto himself," that man is a social being and cannot develop except in society. So we have no quarrel with those who look at the other side of the shield and say that the work of education is to fit a man for his social environment — for the civilization in which he is to live. Education, in the sense of work consciously done to promote this development, is but one of a number of forces working toward the same end. Still further restricted to the work of the schools, it occupies a still smaller part of this field of labor. It is only in this narrow sense that I shall attempt to discuss our educational problem today, tho it may be necessary to look briefly over the whole work in which our schools are bearing and are to bear a part. It must be borne in mind, also, that the forces which work to this end vary in relative importance under different conditions. The teacher has forced upon her attention every day the manner in which the homes of her pupils do, or fail to do, their part. And she must give up much time to work which ought to be done by others. Thus the educational work of the schools and their importance vary under differing conditions inversely as the efficiency of other allied forces. Only one more general proposition demands immediate attention. No civilization is absolutely fixed. Even in China great forces are irresistibly producing changes in the civilization of that most ancient and most conservative state. In what civilization any child now attending school will spend

the prime of his manhood is not yet determined. It is a question of development; and in the development of the civilization that is to be education must play its part. How great changes a generation may bring forth, and how absolutely and relatively great the influence of the schools may be, depends much upon local conditions.

Thus we return to the proposition that different races and localities have their own peculiar educational problems, and to the consideration of the peculiarities of the problem which confronts Hawaii. Since every race has its own past, present, and future to consider, and since individual peculiarities complicate every educational problem, no such problem can be simple. But when peoples of different races, different civilizations, different ideas, and different ideals become mingled, the problem becomes especially complicated.

At first glance it might seem to an outside observer that in so small a country as Hawaii, extending over so few degrees of latitude, whatever the heterogeneity of the adult population, the children, under the influence of homogeneous environment, would readily approach homogeneity. But, in spite of appearances to the contrary, the environment of the children of Hawaii is exceedingly diversified; for it must not be forgotten that environment is both physical and spiritual, of things and of man, or that it is the spiritual element which produces the quickest results. It is easy to believe that our emerald isles, our perpetual summer, our balmy breezes, and our beryl seas will exert an influence upon the characters of our boys. But one bad boy makes his influence more evident in five hours than our physical environment does in a generation. While the physical environment of the children of Hawaii is, in a general way, homogeneous, their spiritual environment is the direct opposite. The most powerful of all the influences which surround the child, whether physical or spiritual, are those of the home; and homes and home life and influences are especially diversified in Hawaii. And religion, at home and abroad, is the most potent influence in the child's spiritual environment. In Hawaii the Buddhist temple and the Christian church stand on the same street, and the family altar and the shrines of ancestors are to be found in adjacent homes.

But when we speak of the influence of environment upon the individual, we speak in metonymy. It is the psychical response to the stimulus of environment which really influences development. This response is determined, in turn, by the temper of the individual concerned. And that temper comes down to him mysteriously from all his ancestors, thus making him in a peculiar and just sense "the heir of all the ages" thru which he has, in regular order, descended. Thus race differences are seen to be deep-seated and not dependent upon present environment.

So at every turn we of Hawaii find ourselves face to face with the race problem. For it is necessary that our heterogeneous population be

made comparatively homogeneous. It is hard for those living in other parts of the country to appreciate the magnitude of this part of our problem. The ends of the earth meet in Hawaii, and no one race is predominant in numbers. A careful study of the situation at the time the islands were annexed to the United States led me to believe that, barring immigration, the future population of Hawaii would consist of Polynesians, Asiatics, and whites in nearly equal parts. But since that time there has been such activity in the matter of Japanese immigration that these estimates of proportions have been seriously disturbed. Present indications are that the Asiatic element, again barring immigration, will be almost half of the generation next to be born in Hawaii.

But quality as well as quantity must be considered in discussing such a race problem. And there is a very radical difference in quality between the white, the brown, and the yellow races. The white race is pre-eminent for active, self-assertive, strong individuality. It is in this race that individualism is found in its extreme form. On the other hand, the Hawaiians are of the extreme passive type, influenced somewhat by their contact with the white race. The Hawaiian "ancient régime" was based upon and fostered absolute submission to authority; and all authority was fortified with the strongest religious sanctions. Men of the passive races wish to be governed well. Those of the active races wish to take part in their own government and in the government of others. From the time of King John till the present, part in the government of England has been reluctantly yielded from time to time to the demands of ever-increasing sections of the population. Kauikeaouli, the third of the Kamehameha dynasty, gave to the people of Hawaii, without coercion and without demand, or even desire, on their part, practically all that the English people have won during all these centuries. The people sought no part in the government, and have never magnified their office as voters. They have been content with a government which fulfilled its purpose to their satisfaction, without question as to their importance or their rights in the matter of legislation or of administration. They have acquiesced in the enforcement of the law by the regularly constituted authorities, even when they have considered rank injustice to have been done, trusting to the constituted courts of the country eventually to right the present wrongs. And they have never attempted to force the hand of justice. That species of anarchy facetiously called lynch law has never been, even temporarily, the law of the land among the Hawaiians. It develops as an extreme manifestation of active tendencies. Such are some of the more notable race characteristics of these two elements of the population of Hawaii. The problem of adjusting these two elements to each other, under a common civilization, is a part of the larger problem which the schools of Hawaii must solve. The adjustment of cognate races and the assimilation of relatively small incongruous elements is a comparatively

simple matter. But here we have two elements of most diverse character in almost equal numbers. And our problem is still further complicated by a still larger Asiatic element, not closely allied with either of these, and which cannot be and ought not to be united with the other elements of our population to form a common people. It involves at least two races of men in nearly equal numbers, living side by side within our narrow boundaries, without uniting. In some respects ours is the problem with which our brethren of the South have been struggling with so much of courage and so little of satisfaction.

Language has been considered a solvent of racial incongruities; and in this there is a large element of truth. Those who have a common language understand one another better than those who have not. And "to know is to forgive," as the proverb has it. To teach all our people the English language, and thus make Anglo-Saxons of them, would, indeed, be a very simple solution of our race problem; and it would have the virtue of laying out very definitely the work of our schools in such solution.

But the educated Irishman of today is more Irish in everything else than in language. He may not be able to speak the Keltic tongue, but he thinks and feels and acts as an Irishman. French blood is recognized by the Gallic temperament in Americans of French descent long after the last trace of the foreign tongue has been lost. The despotisms of Europe reason but superficially when they attempt to crush the Polish spirit by crushing the Polish speech. Altho English education for Hawaii has everything in its favor and is an absolute necessity, it offers but a small part of the solution of this great problem. Polynesians and Asiatics cannot be made to think and feel as Anglo-Saxons by the simple process of teaching them the English language, or by any other process which does not involve evolution thru generations. It will be a long time before we have a homogeneous people, even in the sense that the cognate races become homogeneous in the ordinary American community. Yet in the meantime we must live together.

What, then, is this great race problem in Hawaii? It is this: To develop a truly Christian civilization, a civilization which, like the love of Christ, is broad enough to embrace all peoples — so broad that all the races may find prosperity under its benign sway. Our Hawaiian civilization should be based upon broad charity and universal good will. The civilization which the active race has developed, and in which it has been trained, based upon an assumption of universal selfishness, has precipitated a struggle in which the passive race is at a great disadvantage. It is a melancholy fact that the influence of the white man and his civilization, in contact with aboriginal races, is generally the influence of the fabled upas tree. From the time of the ancient Hebrews, who shut out from the blessings of their civilization practically all other peoples, down

to the time of the Americans, who have not yet developed a civilization sufficiently broad and sufficiently Christian to bless the white man and the red, comes the same monotonous story. Hawaii's problem is the world's problem. And its solution is pressing upon her most urgently. She has three races, no one of which should be withered beneath a hostile civilization. This is especially true of the sons of the soil. If the worst come, the Japanese can return to Japan and the Chinese to China; but where shall the Hawaiians go? Here they were born and here they will die. They call for more than toleration. Who are we that we should *tolerate* this remnant of the people to whom God gave those fair isles fresh from his creative hand, and who for nearly fifty generations have known no other home? They are now Americans in spite of themselves, and for these reasons their silent appeal to their neighbors of the active race is especially strong.

It may be well for the exigencies of oratory to say that we can bless any people on earth by extending our institutions over them; but the man who makes such a boast leaves a suspicion that he is better at getting votes than at interpreting history. The case of "Poor Lo" should serve as a warning against believing anything of the kind. No; the problem is more difficult than this. It is Hawaii's good fortune to have many of the world's great problems in comparatively simple form and in small compass. This problem is a case in point. Its solution is at once her urgent necessity and her sublime mission; for it will be her contribution to the whole world. In what measure can she succeed?

The question whether any great attainments in the way of civilization can be made in the tropics has been seriously discussed in the United States by men of recognized ability. Unfortunately some of them have followed a course of deductive reasoning from premises not well established, reaching conclusions notably at variance with historical facts. Egypt, the home of that ancient civilization to which, thru Greece, Europe and America are so much indebted, lies south of the isothermals of Hawaii; and it is climate rather than mere latitude which has been held to prohibit the development of civilization in the tropics. And, notwithstanding their homes in the tropics, in the matter of civilization the Incas and the Aztecs were by all odds the leaders of all the peoples found in America at the time of its discovery to the Europeans. Of course, the temperate zones are the homes of the highest orders of civilization. If there were any doubt of this, it would be necessary only to ask those who live in those climes; and who should know, if not they? But in view of the facts of history, and of that of Hawaii especially, I refuse to consider the possibility of the development of civilization in the tropics as an open question. If we of the tropics fail utterly to solve our problems in civilization, we shall have no right to attribute our failure to the effects of climate.

The problem of school education in Hawaii, then, is to take a just part in the development of this civilization so necessary to the future prosperity and happiness of the people, and to prepare individuals for its duties and privileges. Reverting to the statement that the magnitude and importance of the work of the schools vary inversely as the efficiency of the other agencies of civilization, it follows that the responsibilities of the educational workers in Hawaii are exceedingly great. On the one hand, the usual social and religious institutions which serve to unify peoples, or to bring them into pleasant relations, are either entirely lacking here, or they fail to reach at once all of the important elements of the population. On the other hand, the schools maintain a position of such dignity in our communities as they seldom attain elsewhere. Teachers worthy of respect command an unusual degree of deference among the people. It is rarely, indeed, that it is given to schools in the same degree to reach the parents thru the children. The responsibilities thus thrown upon our schools can be inferred very readily.

The problem of giving these elements of our population a common tongue has been mentioned, and the absolute necessity of its solution has been recognized already; but it requires a word more, lest its magnitude be not fully appreciated. According to our latest census, that of 1896, but little, if any, over 5 per cent. of our school population are of English-speaking parentage. In most schools of Hawaii there are children who speak at home from two to seven different languages, and yet none who speak English—the language of the schools. Yet, as a means of further education, a common language is all-important. This is almost exclusively the work of the schools.

Our schools are, in a special sense and most emphatically, social institutions. The great art which our pupils of the various races must learn is the art of living together in peace and harmony. Their most important lessons are those of mutual respect and forbearance. While it is our prime work to exercise our pupils in those virtues upon which the peace and stability of society in our land so especially depend, it is also important that these virtues be fortified with the reasons which make them such. As the importance of our teaching these lessons is so great, it is fortunate that our opportunities are equally great. There are few countries where the foundation principles which underlie social order develop so plainly before the very eyes of school children.

Such are the chief peculiar features of the educational problem in Hawaii. It will be seen that some of the great differences between it and the general educational problem are of degree rather than of kind. An absolute solution of our problem is not to be hoped for until some of our brethren of some other part of the world shall have solved theirs. Yet, under our peculiar and great difficulties, the educational workers of Hawaii are taking up their task with such wisdom, strength, and courage as the God of peace has given them.

THE AVERAGE SCHOLARSHIP OF THE AVERAGE PUPIL

BY FRANK RIGLER, SUPERINTENDENT OF SCHOOLS, PORTLAND, ORE.

There is an old principle of arithmetic that, if several quantities have the same numerical value, the multiplication of this value by their number will produce the numerical value of all. Further, tho the separate quantities differ slightly, or even considerably, in their values, if, by previous operations of addition and division, their average value has been ascertained, this may be taken to be the numerical size of each, without sensible error in the result. This, then, is the original and legitimate use of averages. They enable us to substitute multiplication for addition in obtaining large results. When employed in an opposite way, i. e., when, by the addition and division of a great many numerical values which differ considerably from one another, an average has been obtained, and an attempt is made to use this average as a numerical value of any single quantity, the result is apt to be disappointing. Who, for instance, could have ascertained the temperature of this room on this particular morning by consulting the carefully computed average of the weather bureau? The average wages of the workmen in a large factory give no idea whatever of the income of the great majority of the employés, for the reason that a few superintendents, foremen, and skilled workmen receive very much more than the others. Their salaries make a notable increase in the dividend without greatly affecting the divisor. The average age of a class of pupils gives, for similar reasons, scarcely any idea of the ages of the majority of its members.

In the business of teaching I have noticed that most, if not all, of the uses of the average are of the wrong kind. If it has been determined by the manipulation of tables set down in superintendents' reports that the average age of a class is ten years, it is at once assumed that a quantity of work sufficient for a ten-year-old child should be exacted of every pupil in that class; and if some of the pupils show a disposition to do more than the allotted portion, they are to be restrained, to prevent a precocious development which must lead to premature decay. Now, even if all ten-year-old children learned with the same facility, the fact that a large majority of the members of the class will be older or younger than ten years would make the assignment inappropriate; but no one can say what quantity of work is just sufficient for any particular ten-year-old child. Some will do more than others, and again the average is used. Nor is this all. Not only must the total quantity of work be the same for all, but the portion meted out in each subject must be

the same. It matters not that a pupil learns arithmetic easily and grammar with difficulty. He must do the same work in each as does his companion who comprehends grammatical relations without trouble, but blunders in his mathematics. True, this purpose is thwarted by the varying natural aptitudes of individuals, and when the term is ended, pupils are found who have run beyond the limits in some subjects and have fallen lamentably short in others. And now what is done? To determine whether or not a pupil should advance, his attainments are averaged, as if, by a brief computation, his superfluous knowledge in one or more subjects could be cut up and distributed over his points of weakness.

The immediate results of the errors just enumerated are bad enough, but the indirect effects are worse. The long series of years during which the pedagogical mind gave unfaltering assent to these doctrines witnessed the evolution of the average ideal child, for whom not only courses of study must be made, but, what is infinitely worse, to whom all instruction must be addressed and all devices adjusted. In many a schoolroom today most of the teaching is directed, not to the living children who sit at the desks, but to the composite average of them all — a mere figment of the teacher's imagination. I am aware that to correct this last-named evil strenuous efforts have of late been made; but it seems to me that these efforts, to be successful, must be reinforced by an attempt to amend the doctrines out of which the evil grows.

In the first place, the course of study ought not to be made for the so-called average child, but for a child somewhat slower than the average, with some provisions by which quicker children may advance more rapidly. That this can be done, and done in several ways, is demonstrated by the methods of classification and promotion now in use in a number of cities of considerable size. In Portland our standard rate of progress would take a pupil thru the work of the elementary school in nine years, without repeating the work of any grade; but a faster rate is offered which, if continued, would finish the course in six years. A child may take the fast rate one year and the slow rate the next, for the organization is the same at the beginning of each year. A child of good mind, but delicate body, may attend school seven months and do as much work as a slower child does in a year. Each year about one-third of the pupils take the faster rate; this makes the average eight years — just what it is where only one rate is maintained, but with advantages to individuals which are not difficult to perceive.

I know there are those who deny the desirability and question the feasibility of any plan which gives results such as those just named. It has been asserted by men eminent in the educational world that, so far as mere acquisition of knowledge is concerned, the problem admits of easy solution; but when thought-development, toward which modern

courses of study tend more and more strongly, is taken into consideration, the problem becomes serious and difficult—so much so, I infer, that all attempts to solve it would better be abandoned.

Let us consider this a moment. It is assumed in recent pedagogical discussion that in the psychical development of the individual fairly well-marked epochs may be discerned, corresponding in their essential features to similar epochs in the development of the civilization of the race. Just what these epochs are, and just what psychical activities in each are necessary to prepare for the next, has not as yet been clearly stated; possibly it would be more accurate to say that concerning both these propositions various conflicting statements have been made. Let it be assumed, however, for present purposes, that the study of this problem will, in the future, be prosecuted to a successful conclusion, and that practical schoolroom exercises will be devised adequate to stimulate sufficiently each instinctive activity at the time when its waking power begins to assert itself, without continuing such stimulus long enough to suppress related instincts which arise later and need a different form of exercise.

When this is done, it will be found, doubtless, that children reach the same epoch at different ages, that the time spent in a particular epoch varies with individuals, and that the same child will pass promptly thru one stage, while he tarries an unexplainably long time in another in which many other children neither halt nor falter. The future scientific course of study will have, therefore, to ascertain by addition and division the average age at which children reach a particular stage of mental growth, and the average time required to pass thru that stage. It will, like all its forerunners, have to deal with that phantom of the pedagogical brain, the average child, a being no more to be found among the real children who come to our schoolrooms to be taught than the average physical man, whose height, weight, proportionate size of parts, and distribution of tissues have been computed with so much nicety, is to be found in this audience.

It seems to me that the new course of study, because of the closeness of its contact with the child's necessities, will demand, more strongly than its predecessor, varying rates of progress for those who take it.

My second arraignment of the average is that it is used as an instrument for enforcing what is generally called close gradation.

If A and B possess nearly equal knowledge and ability in arithmetic, they should recite in the same class in that subject; but it does not follow that they should receive the same instruction in all other branches of study, in some of which, without doubt, their power and attainments will be found to vary greatly.

An ideal arrangement would permit each pupil to be classified in each study or group of allied studies according to his ability to work

in those studies and without reference to his knowledge of other subjects.

Numerous objections will, of course, be raised to a plan which violates so flagrantly as this does all the cherished traditions of the graded school. It is said that the equalization of a pupil's progress is necessary for a well-rounded development. I understand vaguely what is meant by this trite phrase, and I understand how keeping a pupil back in the studies in which he is strong may prevent the formation of hummocks in those cortical areas whose growth such studies may be supposed to stimulate; but I do not understand how crowding the pupil forward in those studies in which he is weak — and this is common in close gradation — will help him to a proper comprehension of them, and thus secure the cortical growth which such comprehension may be supposed to imply. The rotundity of his cerebrum is impaired, after all, and all that has been accomplished in preventing further impairment is the lopping-off of its better parts, much as the nihilist proposes to equalize the possession of property by destroying it, thus reducing all to the level of a common poverty.

It will be further objected that such a plan will interfere with the correlation of studies; that the modern scientific course of study, whatever it may turn out to be when it gets itself finished, is composed of delicately related parts, which must be taken in due proportion and in fixed order; so that at any point of the pupil's progress his apperceiving mass may be just right properly to receive and to relate the next morsel. I can answer only (1) that there are some items in the apperceiving mass of each pupil not suggested by any course of study; that these vary with individual experience out of school, and are as potent as any others in determining the character of the reception to be given to new ideas; (2) that putting an item in the proper place in the course of study does not insure that the corresponding idea for which it stands will be in the pupil's mind at the time demanded by correlation; (3) that, in order to assimilate knowledge of any subject, what the pupil needs more than related knowledge of allied subjects is knowledge of the preceding parts of the same subject; (4) that the fact that new ideas find different attachment in different minds, because of differences in antecedent experience, is the cause of that mental attrition which is the chief superiority of class instruction over individual teaching.

Another objection, more serious than either of the others, but not, in my judgment, unanswerable, is the following: The thing most needed by an immature boy or girl is the personal oversight of a wise teacher. To place in a room suitable for either recitation or study such a number of children as an intelligent teacher could become thoroly acquainted with, to make them reponsible to her for every act of their school lives, was the prime thing which those who established the graded school

system sought to accomplish. That this end is too valuable to be lightly sacrificed needs no demonstration; nor is any such sacrifice necessary. Every pupil may still have a room in which he answers roll-call, in which he does all of his studying and the greater part of his reciting; but when exercises are coming on which do not fit him, he will leave that room and find his appropriate class. He will still be responsible to one teacher for all of his work, and of any bad exercises not occurring under her eye the report of the teacher to whom the recitation is made will give her ample information.

We have tried this tentatively and to a limited extent in Portland, and we are able to detect nothing but beneficial effects upon the pupils irregularly graded. The difficulties of program-making are not worth considering. Far greater ones are constantly being met and overcome in every high school in the land. Promotion from the elementary school to the high school is not hindered at all. Irregular pupils may do part of their work at the high school and part at a near-by grammar school. It is not to the point to say that the average school principal is barely able to execute the existing system, whose extreme simplicity is threatened by these innovations. My experience satisfies me that such assertions are unwarranted slanders against the men and women who manage our elementary schools. I believe them capable of executing a system approaching in complexity the really complicated facts with which it deals. If I am mistaken in this opinion, that fact should not prevent such changes of system, or managers of systems, as will give to the child, for whom the schools have been created, a better opportunity for that development toward which his natural aptitudes impel him.

FATIGUE AMONG SCHOOL CHILDREN

BY WILL S. MONROE, STATE NORMAL SCHOOL, WESTFIELD, MASS.

[ABSTRACT PREPARED BY THE AUTHOR]

"Under the strains and exhausting calls of modern civilized life," remarked Sir Francis Galton some years ago, "the power of endurance is rising continually in importance. Men and women have nowadays to act rapidly for many hours, and to act exceptionally well. It therefore seems very reasonable that teachers should direct their attention to some fair way of determining the relative power of endurance among school children."

That educators are beginning to feel a measure of their responsibility in the matter of ascertaining causes conditioning mental fatigue is made apparent by the numerous exhaustive investigations carried on during the

past twenty-five years. It is only necessary to recall the studies of fatigue by Binet, Henri, Féré, Coutier, Vaschide, and Grasset, in France; Hodge, Lombard, Delabarre, MacDougall, Gilbert, and Miss Holmes, in our own country; Mosso, Maggiora, and Patrizzi, in Italy, and the long line of German investigators — Kraepelin, Ebbinghaus, Burgerstein, Griesbach, Friedrich, Kemsies, Amberg, and Leser — to be convinced of the activity in investigation and research in this department of educational thought. All sorts of methods have been employed — counting the letters in given paragraphs, adding and multiplying numbers, reading aloud, and writing from dictation; and instruments both numerous and complicated — ergographs and sphygmographs, æsthesiometers and dynamometers — have been devised in order to give exact mathematical measurements to fatigue results.

The problem is not to eliminate normal fatigue, but to prevent extreme forms of exhaustion. It is the latter which is so detrimental to efficient mental work. But that exhaustion is a condition altogether too common in American schools is already apparent to students of the physical conditions of childhood. To except a few cautious and conservative physicians, the medical profession is convinced that the demands of modern education are made in ignorance of the mental capacity of youth; and that, in consequence, excessive fatigue, with its attendant appalling consequences — chorea, hysteria, neurasthenia, and the numerous school psychoses — are directly traceable to the modern public school. The charge is, in part, just, and it is the purpose of this address to suggest some of the more common factors conditioning excessive fatigue among school children.

1. *Infrequent recesses.*— Kraepelin found in his tests that, when the work was interspersed with brief rest periods, it was distinctly noticeable that the work after each pause was more rapid than in the preceding period. This would hint that practice generates skill, and that marked fatigue is counteracted during the brief rest pauses. In consequence, Kraepelin strongly urges the insertion of short rest pauses between periods of school work, in order that the working power of the children may be increased and the destructive effects of excessive fatigue counteracted. He believes that the school must provide more frequent recesses, even tho the length of the session must be increased. Kraepelin's conclusions are fully corroborated by the investigations of Friedrich at Würzburg. Briefly summarized, his conclusions may be stated as follows: (1) School work suffers in quality with the length of the school sessions, that done at the beginning of the sessions being uniformly the best and that at the close the poorest; (2) the forenoon work is always better than that done in the afternoon; (3) the quality of the work is always better when there is a recess during the half day; and (4) still better when the half-day session has two brief recesses.

2. *The introduction of gymnastics as a substitute for recess.*—No one familiar with the proper forms of systematic physical training today questions the utility of gymnastics. But most forms of educational gymnastics call for degrees of sustained attention altogether inconsistent with relaxation and recuperation. Kemsies found that of all school studies gymnastics was the most fatiguing, and Betmann's study shows that gymnastics always lowers the quality of the mental work, and logically suggests that with young and growing children free, spontaneous play in the open air is the best method of recuperation.

3. *Extended recitation periods.*— In the more advanced grades of our schools there is a growing tendency to decrease the frequency of recitations in a given study and to increase the length of the recitation periods. That this tendency is mischievous alike in elementary and secondary schools is clearly apparent when one studies the factors conditioning fatigue. Burgerstein found that the children tested by him did the least work and made the most mistakes during the closing part of the recitation period; and the tests of Zimmermann conclusively prove that more is gained by six half-hour lessons in arithmetic per week than in four whole-hour lessons.

4. *Monotonous character of school work.*— In our enthusiasm for the correlation of studies and the express determination to have one "core" about which all the studies must be co-ordinated, we are apt to lose sight of the fact that all monotony of thought and feeling is a source of fatigue which is real and profound, and if it continues for a considerable length of time, grave results must follow. Kraepelin's experiments conclusively prove how speedily monotonous work will produce fatigue, and Crichton Browne expresses the belief that acute dementia is especially developed under the influence of emotional and intellectual monotony.

5. *Rapid physical growth.*—It is a well-known fact in anthropometry that the growth of the child during his school life is marked by periods of activity and rest, and that during the periods of accelerated growth there is a noticeable diminution in the power to resist fatigue. Acceleration in growth with the American girl ordinarily manifests itself at the age of eleven, and with the American boy about two years later. And yet, in most schools, during the periods of accelerated growth there is often an increased demand made on the mental powers of the child.

6. *Failure to recognize individual variations.*—All modern child study emphasizes the great individual differences among school children, close grading of our town and city schools to the contrary notwithstanding. Failure to recognize mental and physical variations necessarily causes much undue waste of individual energy.

7. *Insufficient and irregular hours of sleep.*—The vasomotor centers are in interrupted activity during the waking hours, and must in consequence produce a condition of fatigue in the brain centers which is proportioned

by the amount of stimulation. As expressed by Howell, three factors combine to produce normal sleep: (1) a diminution of irritability, caused by fatigue of large portions of the cortical area; (2) voluntary withdrawal of sensory and motor stimuli involved in the preparation for sleep; and (3) a diminished blood supply to the brain, owing to a relaxation of tone in the vasomotor center and the fall of general arterial pressure thereby produced. The recent investigations made by Professor Patrick and Dr. Gilbert in the University of Iowa show that in loss of sleep the memory becomes defective, and that the power of attention is thereby largely lost. Recognizing, as we all do, the necessity of sleep for beings possessed of a central nervous system, the unmindful conduct of parents in many communities is simply personified cruelty. The more actively a child exercises, the more sleep he requires; and much more sleep is necessary in our northern climate than in warmer countries. During the winter months, when juvenile social dissipations are most numerous, children need more sleep than at any other season of the year, and they usually get less. If undue fatigue is to be averted, there must be ample sleep periods for the processes of nutrition and reconstruction of the worn-out tissues.

Some of these conditions, it is true, are beyond the reach of the school, but much may be done — much *must* be done — if mental fatigue is to be averted, and if young and growing minds are to be normally developed.

SOME FUNDAMENTALS IN TEACHING

BY L. D. HARVEY, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, WISCONSIN

While the educational philosophers and pioneers are working out new educational systems and new schemes of educational policy, and inviting attention to them, it is still good educational policy to remember that the boys and girls in the schools today will be men and women before the present conditions shall entirely give way to and be replaced by the supposed superior conditions of some new educational gospel.

Accepting the fact that what shall be taught in the schools is determined, for the most part, not by those who are to do the teaching, but by those above them in authority, and that the teachers are held responsible for doing the work set them to do, it follows that whatever can be done to improve the quality of the teaching in the subjects to be taught will be for the best interests of those being taught.

In our professional schools for the training of teachers, in our teachers' institutes, teachers' meetings, and conventions of various sorts I believe that an undue amount of time and effort is given to the consideration of methods of teaching, methods of testing, and methods of drilling

— in short, the method of the How, and too little time and effort to the consideration of the method of determining What shall be taught in any given recitation, what drill exercises are needed, and what testing shall be applied at any given time and for any given class, group, or individual.

In this determination of the What, I do not mean what subjects shall find a place in the course of study, for, as I have already said, these are in the main determined for the teacher, whether he will or not. With the fact settled that a given subject is to be taught, there still remains a very large field for the careful determination of what facts and relations are to be taught, and what it is unnecessary to teach because already known.

I firmly believe that failure at this point is responsible for more of the poor results rightly charged against our schools than failure at any other point. The How in teaching always depends upon the What of the subject, the What of the pupil, and the What of the teacher. Volumes are written presenting in elaborate detail the method of the How. Educational lecturers discourse learnedly upon it to bodies of wondering or disgusted teachers, and educational journals furnish a department of methods dealing with the How, in order to meet a long-felt want. All this is well, but the fundamental thing, the method of the What, is at best merely alluded to as of importance, but left for the teacher to elaborate.

I venture to offer a few suggestions as a guide for the teacher who is interested in determining what is to be taught before deciding upon how it shall be taught.

Four things are to be determined with reference to any given recitation and in advance of the recitation, if anything is to be taught by the teacher in that recitation, or learned by the pupil as a preparation for the recitation. These four things concern themselves with the teacher's determination of what is to be done for and in the next recitation:

1. The teacher must have in mind a definite purpose, or purposes, to be realized in the next recitation.

2. The teacher must have in mind the things which must be known or done in order that the purposes may be realized.

3. The teacher must determine what of the things falling under 2 the pupil now knows or can now do.

4. He must determine what of the things enumerated in 2 the pupil still has to learn or to do, and the order in which they should be known or done.

No. 2 demands an enumeration of particulars of what must be known or done. We may suppose that *a*, *b*, *c*, *d*, *e*, *f*, *g*, *h* are the particulars. These particulars are not dependent upon the pupil in any way. He cuts no figure here. They depend upon the nature of the knowledge. They are the things which the child, or the adult, or anybody must know in order that he may have that knowledge. So that concerns itself with a

careful consideration of the subject-matter, and what is essential to its knowledge. No. 3 is a determination by the teacher today, before the work for tomorrow is assigned, of what among *a*, *b*, *c*, *d*, *e*, *f*, *g*, *h* the pupil now knows. That examination may determine that *a* and *c* and *e* and *g* are known, that *b* is partially known, and that *f* and *h* and *d* are entirely unknown, or that the pupil is unable to do those things. No. 4 is a determination of what remains to be known or done of the things enumerated in No. 2: *b*, added knowledge in that; *d*, *f*, and *h* entirely unknown; those are the things remaining for tomorrow's work. The order in which these things shall be known may or may not be essential. If it is a subject logical in its unfolding, then the order is an essential, because certain things must come before the next thing can be known. If it is a subject that is not logical, it is not so material, altho there may be some one arrangement that is better than another.

When these four things have been determined, the teacher is ready to consider the question of how these things shall be taught or learned, and until these four things are determined any consideration of the How is a putting of the cart before the horse. Other things being equal, the best teaching is always done when this order of procedure is followed by the teacher, either consciously or unconsciously, perhaps best when unconsciously followed. Let us see whether these four steps are fundamental or not.

1. Without a definite purpose in the teacher's mind there can be no definite assignment of work to be done by the pupils. This purpose must be, not so much matter, so many pages to be learned, but what added knowledge, power, or skill is to be the result of the recitation and the preparation for it. Without a definite purpose the teaching will be vague, indefinite, and unrelated. In either case the work of the teacher is fundamentally poor.

2. A broad general purpose in the teaching of the entire subject is essential, but a specific, definite purpose for each day's recitation is necessary, that the general purpose may be realized without waste. The general purpose may be to acquire knowledge or to develop power or skill; the specific purpose must be to acquire certain knowledge today, or to develop power or skill in a certain direction. If the specific purpose is to master a mathematical process, to master the reasons for the various steps in the mathematical process, to teach the drawing of a map, to develop a clear idea of a mountain system, to master a principle, or the application of the principle in physics, or a lesson in reading, in Latin, or in English grammar, it is essential that the teacher have clearly in mind what truths, facts, and relations must be comprehended by the mind in order that the purpose in each case be realized.

3. With this knowledge clearly in hand, it is evident that the next step for the teacher is to determine what of these requisite truths, facts, and

relations the pupil is already master of. It will not do to assume that he is master of none of them, for it may develop that he is already master of most of them, in which case the work remaining to be taught or learned is not sufficient to occupy the available time. Neither will it do to assume that he is master of most of these truths, facts, and relations, as that assumption may be very wide of the mark, and so more remains to be taught or learned than can be mastered in the time available.

4. There remains for the teacher to determine in what order the things to be mastered shall be taken up.

Until these four steps are taken by the teacher, either consciously or unconsciously, he is not prepared to assign a lesson for preparation nor to teach one.

In the testing process these four propositions are equally applicable:

1. There must be a definite purpose in the testing.

2. There must lie closely in the mind of the teacher the things which must be known or done in order that the test may be met by the person being tested.

3. There must be a proper arrangement in the order in which the testing is done. This in the preliminary process already outlined is the fourth thing to be determined.

4. The actual testing determines what of the things necessary to be known or done the pupil now knows or can now do. This in the preliminary process already outlined is the third thing to be determined.

In drill work to secure skill these four propositions are also applicable:

1. There must be a definite purpose as to the kind of skill to be developed.

2. There must be clearly in the teacher's mind the different things which must necessarily be done in order that the skill may appear.

3. The teacher must determine what of these things the pupil can now do so well as to need no further drill.

4. The teacher must determine the order in which the drill work must proceed.

Now, let me appeal to your experience as teachers. Is it not true, when you have assigned work to be done, that in numerous cases, when on the next day the pupils arose and said they were not prepared, and you asked why, they said that they did not quite understand what they were to do? Or, when they arose and attempted to recite, or to answer your questions, it very soon developed that they had not done what you had expected them to do, and on questioning you found that which you expected them to do did not lie clearly in their consciousness? That is true in your high school, is it not? That is true in your normal school, is it not? I suspect it is true with some classes in the university. I know it is true with all classes below the high schools, because the immaturity

of the pupils, their lack of knowledge of what the content of the subject is, makes it impossible for them to know what is in the teacher's mind, unless that teacher does present clearly and definitely the precise points upon which the preparation is to be made. Now, later on, with the more advanced students, when the mode of assigning work has been of such a character as to develop a mental habit, on the part of the students, of close and practical analysis along these lines, we may assign a lesson to students, and say to them : "Your work now is to determine what in that lesson it is essential to know, and then to know it." But the pupils in the common schools are unable to do that. There must be, if there is to be good teaching, definiteness in the assignment of work. There is more waste of time and energy in the schoolroom, all along thru the district school and beyond, because of the failure of teachers to do the things indicated in those four propositions, than in any other place where failure occurs. If you will stop to think a moment, it will occur to you that in any subject it is not a matter of so many pages. A student is out of school for a week, or two weeks. What has he lost ? Fifteen pages—so many square feet of paper and printer's ink ! What has he lost ? He comes back today, to enter his class. Is he prepared to do it ? Here is a boy who comes from the district school into the high school, and he has not studied all the subjects that the pupils in that high school have studied, or he has not had them in their entirety. Shall he go over that area which they have gone over ? Must that be done ? Or is the question, What has he to know or to do in order that he may do this piece of work that his class in the high school is doing ? That is the first question. When you have settled that, the next question is : What of those things does he now know, or can he now do ? And then you settle the question whether or not he is prepared to enter that class. And if you find that he is not prepared to enter that class, because he does not know enough of those things, then this follows, that you have before you definitely and in a clear-cut form the precise things which he must know, and you can focus his attention upon them, and he will do in a month's time on those essentials that which will enable him to do the work of his class ; whereas, if you take the surface plan, the area system, it will take him a year to get ready to do it. What is true of him is true of the student who has been absent for a week thru sickness, or whatever cause. It is a misfortune that he was absent, but perhaps it is not worth while to punish both him and the teachers for his absence, if the loss can be remedied without such punishment.

Is it feasible to use this plan ? You will say : "I always have a purpose in teaching, but I do not formulate and write out all the things that have to be known or done in order that the purpose may be realized." No, I know you do not, but it would be a very excellent piece of mental gymnastics to do it. If anyone doubts it, let him make the attempt, and

before he has worked out half a dozen lessons it will dawn upon him that it needs an organization of his knowledge such as he has never attempted before. The teacher may say that he does not have time to do it. He hasn't time not to do it. The doing of it will soon put the teacher into such an attitude that unconsciously his work will take that direction; and the best teaching, of course, is always done when the method does not come into consciousness. But we never reach that point with any certainty until we have consciously worked the matter out, and mastered it, and it becomes a habit of thought. That is what is needed in the schools. Try the experiment of formulating and putting into good English your purpose in a recitation in arithmetic with a primary class, an intermediate, or a grammar- or high-school grade, or a class of teachers in an institute. What more are they to know when they have finished the recitation than when they began? Get something definite there. Try it in a reading lesson in the primary class, in the Fifth Reader, the class reading some piece of standard literature. Have you a purpose definite enough so that it can be stated? If not, then bear with your pupils in the recitation, when they fail to state definitely what you think ought to be stated, and you tell them, "The reason you can't do it is because it isn't clear in your own mind." The very effort to formulate this purpose will clear up and make definite the purpose. Then, when you have it formulated, go back along the line, and see what knowledge is essential to the mastery of it. Suppose, for instance, that it is the primary child standing here facing an intermediate or grammar-grade lesson. What knowledge must that pupil have along this line so that he may do the things which are to be done, or learn the things which are to be learned in this lesson tomorrow? You may say that that requires an enumeration of all the knowledge the child has up to date, and of the added knowledge coming from a mastery of the lesson. In a large sense, yes; but in a practical sense, no. Because this is true, your work each day with the pupil in that and other subjects is putting you in possession of the things which that pupil knows, and enables you to assume with reasonable accuracy the scope of his knowledge; and so you do not have to go back and enumerate everything which must be known. As your acquaintance with the pupil extends, it becomes more and more an enumeration of the things which must be known, and which you are reasonably sure are new to the pupil, or which contain some elements to him unknown. To make this enumeration is a very valuable piece of training for the teacher. I have seen, and you have seen, again and again, a recitation prove a failure, the students being unprepared, because neither teacher nor pupils had recognized that there were things lying back there, and unknown to the pupil, which had to come into his mind before he could do the work, and because an effort had been made to have it done with that element left out without which it could not be

done. If we determine and formulate definitely and clearly what has to be known or done, in each lesson, in order that the lesson may be mastered; if we then follow this by such tests as are necessary to determine what of these things the pupils now know or can now do; if we then teach or assign to be learned in their proper order the things remaining to be known or done—we shall put our teaching upon a basis fundamentally correct.

QUO VADIMUS?

BY MRS. HELEN L. GRENFELL, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, COLORADO

The strength of the nation depends upon the strength of the individual, just as the strength of a chain depends upon the strength of the links. The perfection of the character of the individual thru a harmonious and systematic development should then be the subject of the closest study, and, since in our own nation we must endeavor to evolve a high grade of national character from a conglomeration of apparently diverse forces and conflicting social conditions, we must be sure that we are misdirecting no energy, and, as we have accepted the fact that education means the proper training of the youth, morally, physically, and intellectually, so that he may be prepared to act well his part in life, in our common-school system we must establish an ideal wholly American.

The school is weak in that it does not foster the paternal spirit, or the close personal relation existing between parent and child. There is perhaps nothing more hopeful and helpful to the child than the realization that, come what may, there are those in the home who are on his side and on whom he may depend in all emergencies. He knows that they are interested in his work, that they watch his movements, are proud of his successes, and sympathize with him in his failures. To hold and keep this strong bond of sympathy is sufficient reward for his toil, and for it he is willing to suffer and labor thru all difficulties. This is virtually all of life to him, and well-nigh sufficient reward for every difficulty. It is almost impossible to secure this reciprocal feeling in schools, but the more nearly the school approaches this relationship, the more nearly will it have removed one of the great obstacles to efficiency. A good home is not only typical of the relationship that should exist between teacher and child, but it is prophetic of what we shall be to each other in the great hereafter. The home is the oldest organization of mankind on earth. It is the unit of all organization, and in many respects the highest and most beneficial; all other organizations—community, state, nation—are

founded on it and could not exist but for it. "There is no place like home;" there never has been; there never will be.

All government in early civilization was carried on thru the family. The family was not only the highest, but the only source of authority. The association spread by kinship and was enlarged to tribes ruled by the oldest. Common danger and common interest caused tribes to be associated together for their common welfare and protection, and the multiplication of these associations developed the state and the nation. Thus from the family came all government.

Our common school grew out of the home and its necessities in much the same way. The child needed to be taught, and in the early settlement of this country, the whole time of the parents being taken up in providing the necessities of life, they hired a tutor. This tutor or pedagog went from house to house and taught, and finally his employers combined their interests and provided a place where all could be taught, each bearing his proportionate share of the expense. Naturally, those of the same attainments were taught together, and thus was developed the class; out of the class grew, in course of time, the grade, and from the grade the graded school, and from the graded school the graded-school system that is the source of this large convocation, and by which fifteen million children of the United States are taught today. The school, then, in all its greatness, is the outgrowth of the home. It touches and is upheld and maintained by all the families of the United States. It is man's providence against ignorance and for wisdom in the child. It is the home's way of working out the best interests of the child. It is the creation and creature of the home, and not the home its creature.

Let us consider the relation of the family, of the home, and of the school. There is in certain sections, in certain schools, and in the minds of certain people the idea that the school should be dominant over the home, that parents should yield all their authority and obligations to the school; and again, there is, in certain sections, in certain homes, the idea that the school is a usurper of authority, and that it encroaches in many ways upon the rights of the home.

What are these lines of encroachment? That we may understand them better, let us outline to a certain extent the rights of each, and point out where each is strong or weak, where each makes for a better development of the child; for it must be admitted that the school has no right to exist except as it affords better conditions for the child and his development. The home has and can defend the priority of right, and we can only plead the cause of the school in so far as it can do more for the child than could be accomplished without it.

It has been customary for some parents to view the child as their sole property. To the parents, they claim, belongs the right to decide in all cases as to the disposition of the child; that there is no authority beyond

them. If they choose to educate the child, well and good; if they choose that he should grow up in ignorance, their right there is none to dispute. This idea seems to place the child as a mere chattel to be disposed of to the highest bidder for the sole benefit of the parent. It is a belief that degrades the very idea of parentage. The child is viewed from a commercial standpoint, as being able to produce so much for the family.

The conception of the state seems to be that the child does not exist entirely for the parents' good, but for the good of all. That if the child suffers the whole state suffers, that if the child is benefited the whole state is benefited, is this conception. In ancient times, when the boundary of government coincided with the boundary of the family, perhaps they held, with some right to acceptance, that the benefits to be derived from the child belonged only to those within the immediate family; but as the idea of obligation spread beyond the bounds of family to other families, and from families to neighborhoods, and from neighborhoods to states, and finally to nations, the interdependence of the whole world was established, and the enlightened man looked upon all mankind as his people.

Now, does the parent lose in this case, or is he not rather the gainer, since he receives in return for his good will toward others the good will of all others toward him?

Man is naturally a gregarious animal. He thrives best and comes to the highest state of perfection in association. Living alone he meets no thoughts or wants higher than himself; therefore his aspirations soar no higher than himself. The moral law has little or no application for him when living alone. He cannot love his neighbor as himself. He cannot hate his brother, nor can he heap coals of fire on his head, nor do unto others as he would they should do unto him. A large part of the blessings, as well as the curses, that are the heritage of man come from association. In a large sense "it is not good for man to be alone."

A large part of the intended environment of man is man. Hence, one of the main points of strength in the school is the fact of association or a common purpose. There is an advantage in being taught in numbers — the advantage of a variety of ideas and expression, the advantage of good-natured competition, the advantage of the inspiration lent by association.

It may properly be claimed that the school is the place where the citizen is developed. The regard for the rights of individuals and of the home, respect for the feelings of others, a realization of one's own significance and insignificance, can hardly be attained without the daily contact with many fellow-creatures of our own kind.

Therefore, an unquestionable advantage for the school is the fact that it affords a larger society in which to educate the child than does the

family, and, in consequence, the education will be broader than if the child is trained alone. This larger society fits him for a larger usefulness and gives him a preparation for citizenship in his country without which he would be illy fitted. I here take it for granted that one of the great duties for which we should seek to fit the child is his duty as a citizen — his duty to others outside of his immediate relations. Any method that looks toward education and fails to do this would be futile. In this larger society of the school the child begins his education in citizenship in a manner he never could reach in the home. In the presence of an assembly the individual is aroused, agitated, swayed, and inspired. The thrill of numbers is electric. All impressions are deepened and intensified. In the community life of the school the child learns lessons of others' rights, of truthfulness, of patriotism, of the duty of sustained effort, that he could not get at home. Where else could he be brought to such a realization of the effectiveness of united action? The school is the great necessity of a free democracy. It is indispensable in bringing up the citizens of a republic. But because this is so, it does not follow that it is the only necessity in the education of our youth.

It is weak in that it does not respond to the property right or desire. In a large measure "mine" and "thine" are obliterated in the school. It is "our teacher," "our school," "our holiday," and there is nothing in the school to which exclusive ownership can be claimed by the child. In the family community of ownership this is true at first, but it is not the intention of the family that this shall hold good for any length of time. The child will gradually develop beyond this as he is given objects which are a pleasure to him, largely because of his exclusive ownership. This idea of individual property right is a fundamental one, and is closely associated with individual responsibility. The child must be taught individual responsibility before he can be taught collective responsibility. If there is no "mine," there can be no "ours" to the child. The exclusive idea of "ours" leads to communism. According to the latter doctrine there is no individual right; all right is associated; every individual is subservient in all things to the mass. Organization carried too far becomes communism. Individual rights, if carried too far, become nihilism. Both the individual and the associated right must be kept inviolate. Let the school recognize and know the one and the home maintain and promulgate the other.

The home, likewise, has its advantages over the school. It has the power of the parental influence, and therefore lays the foundations of virtue — obedience, self-control, and integrity. While their cultivation should be carried on both at home and at school in an orderly, harmonious way, has not the all-wise Creator, in giving each child two parents, designated its primary instructors? It appears to me that the most natural thing would be for parents to rear and train their own children;

and, in reality, nearly all that the school does could be done by the intelligent parent in the home. And, in considering this subject, the first problem that presents itself is this: Should the school continue to assume gradually all the responsibilities of the child's education, encroaching more and more upon the duties of the home?

Is it a possible thing for the public school to equip the pupil intellectually, to drill him physically, to train him manually, and to develop him morally? It seems to me that it is manifestly impossible to do all this during five or six hours out of twenty-four. Education is the result of the work of all the hours of all the day, and the three-fourths of the child's out-of-school life contains fully as powerful formative elements as the one-fourth in school. The tendency of all our new methods in teaching is toward individual work. The ideal is the all-round development of the child. The ideal is true. The tendency is just. But the mechanical conditions hampering the work are slow in reforming, and without the most effectual co-operation of all the educative influences cannot be even approximately realized.

Are we not making a mistake in assuming to be all things to all children? Is it not too often taken for granted that, if the excellence of a given feature of education can be shown, then it it proven that that feature should be included in the public-school system? Because it is well that boys and girls should learn the use of tools, the accomplishments of sewing, cooking, drafting, typewriting, and many more useful arts, it is thought that all these things should find a place in the school curriculum. Is the tendency not a similar one to that of paternalism in the government? The socialist would have poverty and anxiety abolished by a leveling-down and leveling-up process that would place all people beyond the reach of want and below the possibility of ambition; and some of our foremost thinkers prophesy the necessity of the country's going thru a period of trial of some form of socialism before a higher and truer solution of our economic problems will be attained. It is possible that such a transition period is inevitable in the educational system.

We already have a seeming conflict between home and school in our compulsory-education laws, which, to a certain extent, take from the parent the right to decide whether the child shall attend school or not, but which at present are unfortunately a necessity on account of the nonfulfillment of their natural duties by certain parents thru ignorance or indifference. It has been decided in a number of states that the school has charge of the pupil from the time he leaves home for school until he returns, and even that the teacher has the right to punish the pupil for misconduct during days out of school.

It may be that we must proceed from the step of providing free textbooks in the schools to supplying the indigent with clothing suitable for

attendance, and then with baths and matrons, and then with hygienic food; and the nation awake at some future day to the knowledge that all responsibility has been gradually removed from parents, and every encouragement is offered for the continued reproduction of beneficiaries of the government. Then a halt will be called and a revolution precipitated, from which we shall doubtless emerge with a wholesome lightening of the community burden and a wholesome individual distribution of responsibilities. Still, even as the reorganized government, after its socialistic experience, may need a century of struggle toward independent citizenship, so the debilitated home condition may require years of bitter training in order to recover its responsible tone. Is it not a serious duty of this generation to avoid such disaster?

There is nothing new under the sun, and one advantage in this fact is the opportunity afforded to profit by the mistakes of those who have preceded us. We should not follow in the footsteps of Sparta, whose system of state monopolization of the training of its youth exaggerated those defects of national character which proved its undoing.

The socialist doctrine assumes that men do not wish to do their duty and should be protected from the results of their own inefficiency and weakness. It should be our aim to educate our children for responsibility, not for shifting their burdens upon the government; for ever loftier and nobler ambitions, not for the destruction of all ambition. The little child is led in taking its first steps, not to make it dependent upon the elder who is leading, but to give it courage to step alone. All the means for its independent action are there, but it has not yet learned the skill for their use. The tender but wise paternalism furnishes only the right aid for the winning of independence.

That hackneyed, but no less excellent, bit of advice given by Oliver Wendell Holmes, to begin a child's education with his grandmother, should be the watchword of our own work. Holmes was right. It is our duty to begin with the grandmother, for we are educating now the grandmothers and the grandfathers of the future. Shall we teach them to banish the charge of their offspring to the regions provided by the public, to consider that taxes will cover a multitude of cares, and that school boards, superintendents, and teachers will turn their children out creditable members of society, while they go on their way rejoicing? Instead of this, in the home, and especially by the mother, should the sleeping individuality of the child be awakened. Every individual has some especial bent. To discover and intelligently aid in the development of the child's native talent, as well as by example and precept to mold his character, is the duty of the parents, and for them to miss such work is to place the child forever at a disadvantage in the world.

We need individuality and independence of character. Each person is a separate unit, and must act first as such, and should never lose his

consciousness of his separate existence and responsibility. Next comes the existence as one of a number. Home has the first chance to impress the child and to make study a necessity to his own understanding. The home can increase the worth of his school training to the child by showing him the practical value of his studies and their relation to life.

It may be inferred from what has been said that neither home nor school is a complete organization in itself for the development of the child. Each, when taken alone, lacks some of the essentials of effectiveness.

To assure properly the reciprocal effects of home and school, by the adjustment of the two into an effective whole, is a delicate and difficult task. The relation may be compared to that of state and nation. The state is self-governing, and receives no interference from the nation until its action encroaches upon the rights of the nation. Then the fact is made evident that the nation is the larger power. In the same way the school is conducted without interference, unless it encroaches upon the supreme power of the home. The difficulty lies in each one's claiming too much. There is room for both, and instead of opposing each other they should be made to work in harmony. Each is imperfect and should bear with the imperfections of the other. Each is necessary and can supplement the other. It would be next to impossible to have a good public school without the influence of the home. It would be almost impossible to have a good home without the influence of the school. They have been wedded so long that we cannot separate them. The question is: Do they appreciate each other now? I believe that this appreciation has at last begun, for, despite the socialistic tendency in our more and more crowded course of study, another tendency is also gaining ground, and that is the drawing together of the home and the school. The establishment in nearly every state and city of parents' meetings is significant of a widespread awakening on the subject of the education of the children; and a hopeful sign of progress toward the ideal union of home and school is to be found in the sympathy and co-operation with educational work on the part of city officials, clergymen, newspapers, women's clubs, individuals—all the important agencies of the community. All friends of humanity should rejoice that a bridge is now building across the gulf once fixed between home and school. Begun on one side with fear, and on the other with trembling, it has gone on and on, and the final closing of that separation will extricate us from our perplexity. It is the working together of the two means of grace given by providence to this age—the home and the school—which will mean salvation. The powers that be in the child's world are taking counsel together, and two powers are better than one, if one is the child's own parent.

The school can be a great factor for good in the child's development,

but it can never be the leading factor. Let us acknowledge its true place and thus strengthen its influence; for if we insist on making it chief, we may ruin its possibilities. If we allow the school to encroach upon the inborn, God-given right of the home, we shall have upon our hands the wreck of both. But we shall not. We shall establish upon a basis of common-sense, justice, and truth the scientific co-operation of home and school, and upon that rock we shall build character that will need no support from paternal government, but will nobly maintain the independence which is America's birthright.

There are two things, amidst all the difficulties thru which we may pass, of which the American may feel justly proud — the American home and the American school. These, united and harmonious, will develop for us citizens who realize for what they are called on the world's stage, and that their call must not be for self alone, but for humanity.

THE UNITED STATES EXHIBIT AT PARIS

BY HOWARD J. ROGERS, DIRECTOR OF EDUCATION AND SOCIAL ECONOMY, UNITED STATES COMMISSION TO THE PARIS EXPOSITION OF 1900

I am here under orders from the commissioner-general of the United States commission, and from the President of this association — for a request from your honored executive is at all times equivalent to a command — to report progress concerning the preparation of the educational exhibit of the United States at the Paris exposition of 1900.

And it may be, I sincerely hope it will be, that, in the midst of the mighty flow of wisdom from this platform and the plentitude of theories rained down upon you, a few plain and dry facts may prove a not unwelcome variation from the purely scholastic program.

The twenty-second universal exposition falls in the closing year of the nineteenth century. The French authorities have, therefore, in view not only the collection of the best and most ingenious products of the brain and hand of creative man, but a retrospective exhibit of the growth and development of each group of material products during the century.

The nineteenth century — what a stride in the march of civilization do its limits mark! Ushered into existence at the close of the great struggle for liberty and equality, it has been distinctively a century of liberty for person and emancipation for mind. From the colonies of Britain, from the steppes of Russia, from the plantations of America, and from the jungles of Africa, shackles have been stricken from the limbs of men.

Not less rapid has been the advance of mind and the conquests of inventive genius. Fulton's "Clermont" creeping slowly up the Hudson,

Morse's telegraphic key ticking off the messages which mocked at space, Bessemer's process which has linked the world in iron bands, are great achievements which stand like monuments along the pathway of the century; but surrounding them and relating to them are thousands of ingenious discoveries and brilliant inventions, in every branch of science and of art, which stamp this century as pre-eminently the scientific age. To sum up these achievements, to place them graphically before the world, to illustrate their development, and to blazon their present high excellence, is the motive of the French exposition of 1900.

No science has made more satisfactory progress during the century, or during a half century, than the science of education. This proposition needs no demonstration to this audience. Should it need practical illustration to others, we might point with pardonable pride to the assemblage gathered in this city, and ask what other profession could bring these numbers over such distances for an interchange of ideas and a renewal of friendships.

The theory of public education, in its relation to the state, has advanced from the education of the few and the select, at personal expense or by church aid, to the education of all at state expense.

The science of teaching has advanced from its chance dependence on the personality of the instructor to the certainty of skilled teachers trained in the principles and philosophy of education.

The material development and equipment of the school have kept pace with the advance in architecture and hygiene.

The literature of education has grown from a few scattered classics to a magnificent library which boasts its Spencer, its Froebel, its Mann, its Hopkins, and its Harris. To portray this growth, to bring it out in bold relief in all its relations to the other groups, is the work of the department of education at the exposition.

The French authorities in their classification recognize education as the source of all progress and give it the place of honor. The building devoted to it is one of those erected in the Champs de Mars. To those who recall the magnificent distances at Chicago and the opportunity presented for bold combinations of landscape gardening and architectural effects, the space treatment at Paris may be a disappointment. Yet in the space at their disposal the very highest artistic conceptions are being wrought, and the result will be a gem with an incomparable setting. The two chief areas available for exposition purposes are the Champs de Mars and the Esplanade des Invalides, parallel with it, nearly a mile away; connecting their southern extremities, like the arc of a large circle, is the river Seine, both banks of which are now public parks and a part of the exposition grounds. In all three hundred and thirty-six acres lie within the grounds, as compared to seven hundred and seventy-five acres at Chicago in 1893.

Naturally there is a proportionate cutting down of available space within the buildings, and the problem has become, not what we may show, but how we can show what we must show. The French have established the ratio that 60 per cent. of exhibition space belongs to the home country, and the other 40 per cent. is to be divided among the visiting nations. I do not know that there is any particular reason underlying this division; probably the all-sufficient one for which the blacksmith thrashed the parson — because he wanted to and because he could; but you will readily see that the exposition is first and foremost a French exposition. Expansion for Americans is not permitted to be the order of the day in exposition circles. When the assignments were made, I railed as loudly as the best of them over the inadequacy of space, but I must confess that it has some mitigating circumstances; for while it does not permit us to show to the best advantage the development of our public-school system, and even compels the omission of many desirable features, it nevertheless checks the tendency to pad out an exhibit with useless repetitions, and bars out the admission of many questionable features which a natural leniency might tempt us to admit, were space abundant. Those of you who studied carefully the educational exhibit of the various states at the Chicago exposition will know quite well what I mean. I deem it not too hazardous a statement to say that, if that exhibit had occupied 50 per cent. less space, it would have been a 50 per cent. better exhibit.

As a result of the limitations of space a retrospective exhibit on the part of the United States is impracticable. We shall leave to our hosts, the French, the responsibility of showing the advance from the crude conditions of early times to the improved facilities of today. We have no doubt they will do it well. They have the space required and the genius requisite. But in the United States exhibit there will be no log schoolhouses, no Webster's spelling-books, no bundle of birch rods, no Ichabod Cranes; nothing but the best material and the best equipment which the schools afford today.

A word as to the theory which underlies the arrangement of the United States exhibit. It is distinctively national. States or any parts thereof are not recognized as units, simply as contributors. We are exhibiting in a foreign nation. It is a matter of no moment to a foreigner whether Kentucky has a better or a worse educational system than Virginia, or whether California is on an equality with Ohio. We present the best work and the most improved methods in every department of education which our country affords, irrespective of its source. At the same time any piece of work contributed from any locality is credited to that locality, and as such will be cataloged and judged for an award. But in arrangement it is simply one factor in the national exhibit of the United States. The same general plan is followed in higher education,

of which I will speak later. I desire to say here, however, that not one person from Boston to San Francisco whose advice we valued or whose aid we desired but has fully indorsed the plan. A president of a prominent eastern university said: "If you will tell us what you need, or what you want from us, in any department of the university, we will prepare it for you, whether it is much or little." That has been the exact attitude of every college and university president, and every city superintendent, with whom we have come in contact. And it is my great pleasure, as well as my duty, publicly to acknowledge the debt which the United States commission owes to the patriotism and loyalty of these men; for we recognize that it is no small matter to make only a partial and incomplete exhibit of the resources of a university or the equipment of a school system, even tho it be to bring toward perfection the exhibit of the nation.

In the arrangement of the net space at our disposal 50 per cent., upon the counsel of the advisory committee of this association, has been assigned to elementary and secondary education, and 50 per cent. to higher education. In the division of the former space the kindergarten comes first and occupies 5 per cent. of the 50 per cent. In this section will be gathered all the statistics and material illustrative of the work of the kindergarten. The elementary schools, divided into two sections, primary and grammar, come next and occupy 65 per cent.; lastly the secondary school, occupying the remaining 30 per cent.

In the primary section will be found the entire exhibit of the primary schools of the country. A similar grouping follows in the grammar section and the secondary section. The exhibit, for example, of the city of Denver may be found in four different sections, but in each section the work belonging to Denver will be placed together. In the cataloging the four sections referred to will be indicated as containing the work of the Denver schools, and their combined work will be entered for awards in accordance with the classification of the French authorities. The exhibit will be a collective exhibit, classified by grades and aiming to show in each grade, step by step, the work which our best schools can turn out. In contributing work to the public-school section scores of localities are forwarding material to a greater or less degree, but the following cities are preparing a carefully graded exhibit from kindergarten to high school: Boston, New York, Newark, Albany, Chicago, Omaha, and Denver.

In exhibiting the work of our colleges and universities, a radical departure from accepted traditions has been made. There was not enough room to grant the institutions which could in equity demand a representation at the exposition space for an adequate presentation of their resources and equipment. Had there been such space, it would have resulted in an endless repetition of exhibits, tiresome to us and bewildering to the

foreigner. It was, therefore, determined to arrange the exhibit by departments, and to invite each university to contribute to one or more departments as they might choose, with reference, perhaps, to those in which they deemed themselves particularly strong, or well fitted to bring out some special and salient features. This was not necessarily the case, however, and many universities are preparing special work at our request, in order to round out certain departments and preserve the symmetry of the exhibit. The departments under the classification adopted are as follows:

General courses: philosophy, sociology and history, language and literature, pure science, fine arts.

Special and technical courses: education, law, medicine, theology, engineering, architecture, agriculture, and other special courses.

As a result of this arrangement we shall have in series illustrations of the most advanced work and processes in all of the great faculties or departments of our universities. The foreigner who is interested in pure science, or in medicine, for example, can find grouped in one place a concise statement of the extent to which this work is developed, with as much illustrative work in addition as the space assigned us will permit. The whole will give a comprehensive view of the field occupied by our great universities.

Of what might be termed exhibits allied to our main educational scheme, such as university extension, schools for defectives, commercial schools, Indian schools, library work, school supplies, etc., time will not permit an extended mention. They are being prepared by the best talent procurable, and will be represented just as completely as the space at our disposal will allow. I will, however, give notice of the preparation for distribution of a series of monographs on education in the United States, designed for two purposes: first, as the connecting thread running thru the exhibit, giving it logical sequence; and I might add that the exhibit will be designed to supplement the monographs and illustrate them very fully; second, as a concise presentation of the educational conditions existing in the United States at the close of the nineteenth century, and their historical development. They will be nineteen in number, and are being written by the best specialists in their respective lines to be found in the United States. The series will be edited by Dr. Butler, of Columbia University.

Inasmuch as my connection with the series rests entirely in an advisory and managerial capacity, I think I may be pardoned for saying that it will be the most distinctly valuable contribution to the educational literature of this country, from a scientific as well as a historical standpoint, that has yet been published. The entire series is contributed by the state of New York to the educational exhibit of the United States.

No pains or expense will be spared to make the United States exhibit artistically worthy of its surroundings. The installation will be of

quartered oak, and the hanging surface covered with fine burlap of correct shade. The façade is designed by one of the most noted architects in the country, whose name I am not now at liberty to mention, and the interior decorations are in charge of an equally eminent artist. The director's office cannot of necessity be very commodious, but its doors will always be open to the National Educational Association, whose members will be made preferred guests.

In the series of international congresses which are being arranged for the summer of 1900 by the French exposition officials education has a prominent place. Already official notices have been received of forty and more congresses, including those on secondary education, higher education, art schools and schools of design, and teaching of modern languages. Many others are in prospect. It is the firm intention of Commissioner-General Peck, in these congresses, and his positive orders to his directors concerning their respective congresses, to permit no person to represent the United States who does not have the authorization of the United States commission, and that authorization will be given no man or woman who cannot, in our opinion, represent our country with honor.

A word as to the purpose which underlies the educational exhibit; its *dominant motif*, if I may use a musical term.

A new type of American has recently attracted the attention of the nations of Europe. It has caused admiration, not a little envy, and some consternation. The type is not new to us. We found it in the Civil War, we found it in the Spanish war, we have found it in every emergency which has ever confronted our republic. Were I fond of metaphors, or writing, may be, for the newspapers, I might term him, as he often has been termed, "the man behind the gun;" but I prefer to designate him as the product of our public school. He is the direct opposite of the machine-drilled man; for, tho they may have in common the same grim courage, and the same implicit obedience to orders, the former has the initiative and the genius which act where orders fail to reach, and where conditions unforeseen arise. It makes no matter to what quarter of the globe he is sent, or with what mission he is intrusted—he can adapt the training which his country has given him to any variation of conditions, and make success where others fail. To show clearly to the nations of the world the school system which produces this type of self-reliant and well-equipped citizen, and to demonstrate that his existence is not the fortune of chance conditions, but the inevitable result of our free institutions, seems to me not only the advisable, but the imperative course to follow.

For this reason, and because it is an appeal to your patriotism and loyalty, teachers, principals, and superintendents, the United States commission feels justified in asking you to contribute your time and your genius to any portion of our exhibit where you may be of service in bringing it to a successful completion.

ART IN EDUCATION

BY ELMER E. BROWN, PROFESSOR OF THE THEORY AND PRACTICE OF EDUCATION, UNIVERSITY OF CALIFORNIA

The word "culture" is often heard at educational meetings. What meaning attaches to it? A much-abused word it is, undoubtedly; yet there is some sense of a common significance running thru the thousand variations of its use. If I mistake not, whatever we mean by culture — be it learning, discipline, enlarged association of ideas, increased nicety of discrimination or depth of insight, training of human faculty — the word carries with it into all of these diverse uses some suggestion or connotation of the beautiful. A cultivated person is one who is not only learned, but whose learning is touched with a certain fineness of quality which renders it peculiarly significant and human.

So, when we speak of art in education, I do not understand that we are speaking simply of a division or an ingredient of education — a unit added to some definite number of other units; but we are speaking of one of those vital elements which pervade the best education, and make it worthy of the name of culture.

This subject verges upon a somewhat technical topic in the general theory of education. A question which has been rather more minutely considered in Germany than in this country is that which has been stated as the question of formal culture. It is assumed that instruction in a given branch of knowledge yields educational results which are farther reaching than is a mere knowledge of the facts that are learned; in other words, that the study of a given subject furnishes the student, not only with a knowledge of that particular subject, but also with certain universal gains which are common coin, and may be freely used in any other realm of thought. Such acquisitions, which may be transferred at will to other fields than those in which they were first acquired, and used therein with full freedom and command, are designated by the phrase "formal culture." Our theory of instruction has varied greatly in the claim to such culture which it has put forth. We were told at one time that the mastery of any subject yields returns which are of equal value in all domains. This view tended to exalt the method and to depreciate the materials of instruction. In later years, with closer scrutiny of the subject, we have become skeptical as to the possibility of formal culture beyond a very narrow range. In consequence we have paid relatively more attention to the course of study, and less to the spirit and form of instruction. But in this, as in many another subject, close analysis has defeated its own

ends. In detecting fine distinctions we have failed to see large significances in which the elements that analysis discovers are enfolded. In the sense of the beautiful, and whatever gives it strength and clearness, there is a subtle and pervasive sort of culture which goes with its possessor wherever he may go, and which pervades, invigorates, and vitalizes a man's thought, whatever it be that he thinks about.

We can have no patience with an education which merely affects a man piecemeal. We demand of the schools that they shall transform and ennoble the human mind, so that one who is educated shall be different in everything that he does, in his whole make-up, from what he would otherwise have been. We are constrained to seek for those things in education which are far-reaching, universal, re-creating.

The æsthetic quality has been strongly marked in historic systems of instruction. We are sometimes at a loss, as we study the history of education, to understand why it is that so large a place has been given to purely artistic subjects. Music was one of the chief divisions of the Athenian curriculum — music, including the study of the Greek poets. Poetry held an important place in the later Roman education. In all of the courses of instruction which grew out of the great Renaissance the ancient classics were studied for their value as literature: Cicero and Demosthenes for eloquence; Homer and Virgil for the charm of elevated narration; the Greek tragedians for moral sublimity. Even the education of that eminently practical people, the Chinese, is chiefly literary in its character, and the beauty as well as the moral quality of literature is emphasized. It is not likely that there has been a clear consciousness of the educational service of beauty running thru all of these systems, but it is significant that things artistic have been held in such esteem by peoples so diverse. A practical education which sets up an artificial opposition between the beautiful and the useful is in danger of defeating itself. Beauty is a permanent human need. An education without due attention to things beautiful fails to give flexibility, elevation, freedom — qualities which are necesary to the full attainment of the useful. It fails to give a certain buoyancy and interest which tone up endeavor and refine the temper of enterprise for all of the activities of life. A practical education fails to be practical when it concerns itself only with "things done, which take the eye, and have the price."

Let us consider a little further the notion that good taste lies at the heart of true culture, and that it is peculiarly universal in its character — capable of unlimited transference. I take it that men differ very greatly in their ability to carry the products of one range of thought into other and distant fields. A genius has been described as a person whose ideas find ready association with a great abundance and variety of related ideas. The peculiar endowment of a genius is, in this view, the capacity for unlimited transference and interchange and recombination of mental

acquisitions. It is not part of the business of the schools to undertake the making of geniuses; but a recognition of the value of this attribute of genius may open our eyes to one necessary function of education. The great majority of men fall into narrow rounds of thought from which they do not readily escape. We are to seek to render the minds of our pupils mobile, ready to put this and that together, free to make unlimited use of all their possessions. There is, to be sure, a kind of mobility and freedom which is characteristic of those who are alert for their own interest; but education seeks for a different kind of mobility from this, a mobility which is unselfish in its aims, which finds its stimulus and its reward in purely ideal conditions. It is characteristic of a refined taste that it is not self-seeking. It is sensitive to differences of value, but it is ideal values with which it concerns itself; and every increase in one's clearness of apprehension and warmth of appreciation of ideal values brings with it new command of one's spiritual possessions, new freedom of movement among the most varied forms of knowledge, and so new capacity for the ordinary business of life.

The taste which has been quickened by the sight of a noble picture is a new power for the appreciation of other pictures. A physician from the prairies of Illinois once visited the Dresden gallery. The sight of the Sistine Madonna roused him from a mere tourist attitude, and gave him a sense of the beautiful in art of which he had never dreamed before. He spent many hours before the picture, visiting it day after day; "and when I went away from there," as he said long afterward, "I found that I could see the beauty in other pictures." And so this man became the center of a lively and elevated interest in true art in that little town on the prairies in which he lived. The appreciation of the beautiful in landscape-painting gives new appreciation of the beautiful in nature. As Browning has said:

> We are made so that we love
> First when we see them painted, things we have passed
> A thousand times and never cared to see.

I suspect that more than half of the beauty that we see in the ocean is what the painters have taught us to see. We think the Yosemite is one of the the grandest works of God on this earth, but it is only by the help of some heaven-taught artist that the most of us can see all the beauty there is for us in that valley of wonders.

It is great gain to anyone when fine music has taught him to appreciate other fine music; and still greater gain when it has fairly introduced him to the exquisite and majestic harmonies of nature. The biographies of musicians are full of instances of inspiration caught by them from nature, and their interpretation of nature's hints has brought a new revelation of the world to countless hearers.

Architecture, too, has been influenced by the appreciation of beauty in

nature. We no longer attempt to explain the origin of the Gothic arch by supposing it to have been suggested to mediæval artists by the interlacing of branches in a forest; but there is abundant evidence that architects who had the full artist spirit have caught inspiration from the forms of nature.

Then there are connections without number — very subtle, it may be, but significant, too — between the several arts. Here, again, the history of music is full of instructive instances. We find Liszt, for example, writing to Wolff in these words: "Here is a whole fortnight that my mind and fingers have been working like two lost spirits — Homer, the Bible, Plato, Locke, Byron, Hugo, Lamartine, Chateaubriand, Beethoven, Bach, Hummel, Mozart, Weber, are all around me. I study them, meditate on them, and devour them with fury. . . . . Ah! provided I don't go mad, you will find an artist in me! Yes, an artist, such as you desire, such as is required nowadays!"

An appreciation of the several arts goes farther. I remember one whose life was given to the service of his fellow-men, who declared that he had been awakened from a listless, happy-go-lucky existence by seeing McCullough play the part of Macbeth. We all know how music has both calmed and energized the noblest souls in the highest human endeavors. That is a fine passage in the autobiography of John Stuart Mill in which he declares his indebtedness to poetry at a critical period of his life:

> This state of my thoughts and feelings [he says] made the fact of my reading Wordsworth for the first time (in the autumn of 1828) an important event in my life. . . . . These poems addressed themselves powerfully to one of the strongest of my pleasurable susceptibilities, the love of rural objects and natural scenery. . . . . At the conclusion of the poems came the famous ode, falsely called Platonic, "Intimations of Immortality," in which . . . . I found that he too had had similar experiences to mine. . . . . The result was that I gradually, but completely, emerged from my habitual depression, and was never again subject to it. I long continued to value Wordsworth less according to his intrinsic merits than by the measure of what he had done for me. Compared with the greatest poets, he may be said to be the poet of unpoetical natures, possessed of quiet and contemplative tastes. But unpoetical natures are precisely those which require poetic cultivation. This cultivation Wordsworth is much more fitted to give than poets who are intrinsically far more poets than he.

We may be pardoned from dissenting from Mill's final estimate of Wordsworth; but his acknowledgment of indebtedness to the poet is important. We cannot but wish that he had gone on to analyze the influence of Wordsworth's poetry upon his later thought. It does not seem at all likely that the æsthetic sense has been altogether absent from any of the transcendent works of human reason. There is an architectonic grandeur, or, if you will, a mighty organ music, in the logic of Hegel. It could not be found there if it had not first been in the mind of the master. Its sublimity and noble harmony seized upon the human imagination. Here is doubtless one ground of the imperial sway which that system exercised over the minds of a generation of men.

The current demand for a larger artistic element in the instruction of the schools ought not, then, to be apprehended simply as the demand for one thing more in our crowded school curriculum. It is rather to be regarded as a growing recognition of one of the essential and universal aspects of all instruction. In a truly æsthetic treatment of education we are seeking for results which are manifest in a finer temper of the whole human spirit — a universal excellence which shall reappear in everything which the educated man shall do. One other aspect, nearly related to this, may be mentioned in passing. Art is the free expression of the inner personality. A quickened sympathy with art and an artistic ideal give new motive for the working out of one's inner self into forms that have social value. The exuberant spirit of art prompts to expression, and artistic ideals tend at the same time to refine and moderate expression. One who has been really touched with the artistic spirit will seek continually for adequate means of giving out his best. The desire for mastership is aroused — the desire for perfected skill. So the artistic spirit, carried into the little details of school life, is found to have everywhere a far-reaching significance.

Now, there is a kind of restless seeking after that which is superlatively beautiful which is hardly in keeping with these educational ends. We do not want, for the purposes of the school, objects of art which are over-exquisite. What permanent place is there in a world of substantial realities for anything like ravishing loveliness — unless it be, indeed, in matters millinery? No man who has any appreciation of the dainty creations with which the better half of our people adorn their precious heads will presume to set any limits in that direction. But the art which educates is not millinery art. It is art that has to do with the deepest and most serious things in life.

There is a kind of petty prettiness about some of the pictures now finding a place in our schoolrooms which does not promise well for the future of American taste. Real masterpieces are, after all, what we want; not necessarily the works of the older masters, but real master-works, surely.

And yet there is some reason for the spirit which seeks among the things which have come down from former generations, expecting to find there, if anywhere, sure ground for unreserved admiration. For all high human endeavor takes on the form of a struggle on the part of a man to overcome the limitations of time. There is a deep world-pathos in the sense, which has been felt in all ages, of the shortness of human life. Men have exerted themselves mightily to add to the span of their earthly existence; but a nobler endeavor has appeared in the effort to do works which shall outlast the worker's term of life. In such a work lies the very essence of mastership. Here is a man who has been able to produce a thing which shall outlive himself. So far forth we acknowledge him to

be a master. Assuming that what he has made survives him because of some intrinsic excellence which renders it worthy to survive, the production is an evidence that the man has come off conqueror in his struggle with time. If time must wait until the man is dead before it can efface the good that he has done, the victory rests with the man in spite of death. And what is this but to say that the man has put some line, or note, or word of eternal reality into his work? Surely, without such elements nothing is worthy to be called a masterpiece. A real masterpiece is something which is found worthy to live. Accordingly, it is something suited to nourish the real, the more than temporal, life of man.

And one way that the true masterpiece proves its title is by becoming more beautiful to us the better it is known. The things which are superlatively lovely at first sight are seldom the things which steadily advance in our estimation ever afterward. A masterpiece is a work which is found continually surpassing itself.

We are changing continually, from childhood to youth, from youth to manhood, from prime of life to old age. And our tastes change with our years. When we become men we put away childish things. But it is sad fortune for us if we must put away everything that belonged to our childhood. You have seen examples of this sharp separation of the tastes and aspirations of adult life from all the associations of earlier years; and you know how painful a case it is. The man who has nothing left but pity or contempt for all that his childhood held dear is one who lives a broken life. I fear that innocence has lost its charm for him; that all the "trailing clouds of glory" have become to him but a vapor of earthly mist. Some sort of continuity of vital interests there must be, if the best things of our boyhood are to live on in our manhood. Such a continuity may be sought in many ways, but it is no small thing that the objects of beauty with which childhood is made familiar should be such as will grow up with the child's own growth. And this is a characteristic of the real masterpieces of art. They have power to grow with our growth. At each epoch in the advance of life, even "down to palsied age," they meet us with new and larger meaning. Happy is the lot of those children who have learned to know and love the old English ballads, the old Scotch melodies, Landseer's dogs and Rosa Bonheur's sheep and horses, the tale of Troy, and, better yet, the stories of the Old and the New Testament, and the noble hymns of the church. Their childhood has given them treasures which they will only value the more when their power of appreciation shall be enlarged and refined.

It is not desirable that a schoolroom should be so decorated as to seem like fairy-land when the child first enters it. Better that he should not find it bewilderingly enchanting. Quiet in coloring; not too great a multiplicity of things in sight, no matter how good each may be in itself; a few carefully chosen pictures — nothing crowded, nothing hurried,

nothing overwrought. Let him find in the schoolroom things which will grow upon him as he continues to live with them. Do not let the effect of wholesome surroundings be neutralized by a different spirit in the daily instruction. Let there be no singing of cheap and catchy songs, or, worse yet, of excessively emotional melodies. Let there be no straining after elaborate grace of gesture, or undue expressiveness in reading. Let there be no honeyed sweetness in the intercourse of the teacher with the pupils. If art is to have any place at all in our scheme of education, let it have opportunity of teaching its own proper lessons — lessons of quietness and confidence, of harmony, of proportion, of clear-grained truthfulness.

To this end it is eminently desirable that the teacher shall have learned the message of true art before attempting to teach the children. It would be well if, before a new picture is hung in the schoolroom, the teacher might live with it for weeks or even months — long years of association are better yet. Not at all that the teacher must talk much about the beauties of the picture. In fact, one who knows well a work of art can say the most about it in the fewest words. It is not well in any case to force the picture upon the attention of the pupils in a set lesson or at a prearranged period. A teacher who knows both the picture and the children can watch for the time when the pupils' minds are open to receive the new message; then, by admitting them to some share in the more mature pleasure which the picture has given himself, he may prepare them for independent appropriation of what it has for them. If beauty has already taught the teacher its deeper lessons, so that his daily work has in it some of the elements of true art, there is hope that the picture which he brings before his class may do somewhat more for their education from the mere fact that he presents it to them.

If the perfection of beauty is of such great value in education, the treatment of imperfection is its counterpart and supplement. The imperfect comes before us most commonly and obviously in the comic. One of the shrewdest tests of the quality of one's culture is found in the things which appear to one as laughable. The immaturity of little children shows itself in the whimsical and surprising ways in which their sense of humor breaks forth. Monstrosities and abnormalities which appear to adults as painful, or as simply insignificant, sometimes impress children as irresistibly ludicrous; and the delicate humor which appeals most powerfully to a refined sensibility may readily be passed over by a growing boy, as unworthy of notice. Humor undoubtedly has a very important place in purely artistic culture, and also in the more general culture to which fine art is minister. It is not mere chance that comedy and tragedy have come freely from the same writer, or that the same actor often appears to well-nigh equal advantage in comic and tragic parts — for human imperfection in some of its manifestations is intensely ludicrous, while it passes over readily into that which is pathetic, or, in more extreme

form, into that which is profoundly sorrowful. Some of the most delightful passages of literature are those which play about the border line between the comic and the pathetic, passing freely from the one side to the other, and with fine discrimination avoiding the false rendering of either. Dickens was comforted by the criticism of the *Pickwick Papers* that the reader laughed at Mr. Pickwick in the earlier part of the narrative and sympathized with him at the last. We have faith in the soundness of heart of an author whose characters call forth both our smiles and our tears. There is something very human about such art. The schools will profit greatly from their association with the artists, if they may thereby help the children to a better appreciation of what is truly humorous and what is truly pathetic. The laugh has a large place in our society of all grades. There is a certain play—I forget what it is called—which is advertised on the bill-boards as promising "100 laughs in 100 minutes." Particularly among the less educated, there is a great craving for the things which are laughable. Humor is the great æsthetic possession of the multitude. With all of its vulgar manifestations, we cannot deny that it is a kind of saving salt in everyday life. Ridicule does much wrong; but it does, on the whole, a great deal more of good. It is rarely in place in the relation of teacher to pupil; but as between children or between adults it has undoubted use. There is a spirit in man which prompts him to quiz into things that are preternaturally correct, and see whether they are sound at the core. A good deal of apparent irreverence is really no worse than this. It assumes that if the object of ridicule is all right at bottom, it will be none the worse for the test that rollicking audacity knows how to apply. I doubt not that some of you in the presence of unusual and oppressive dignities feel a childish impulse to poke with your finger and say "Boo!" This is substantially what the cartoonist does, and his work strikes a responsive chord in the American heart. We touch upon this subject with much caution here in California, for our legislature has recently taken it in hand, and one doesn't exactly wish to be regarded as an aider and abettor of lawbreakers or other dangerous characters. I hasten, then, to say, in order to save myself, that even caricature may be carried to an extreme which good men would not wish to commend; yet a lurking suspicion remains that the ultimate correction of that evil must be found in the achievement of a more genial and less volcanic sense of humor—that is, in a general improvement of public taste.

In the informal association of public-school children there is much laughter. There is the vulgar laugh, the unkind laugh, and the petty simpering and tittering with which we are all familiar. The instinct is a sound one, but it sadly needs direction. Then there is, even among little children, a great liking for that which is pathetic, and among uncultivated youths this often develops into the most unwholesome sentimentality.

The school has done a noble service to our society when it has taught the children to enjoy the laugh of refined appreciation. It will do no hurt, too, if it laugh down morbid sentimentality, provided it does not shame away with it the true feeling which weeps with others' woes.

What is our conception of the relationship between goodness and beauty? This question has much to do with the real attitude and influence of the teacher, and it is not an easy one. We cannot look with any satisfaction on a school where loveliness and grace are exalted above the essential qualities of truth, of industry, of everyday fidelity and honesty. If these things are in necessary opposition, beauty must go to the wall, and righteousness must have supremacy. There should be no doubt about that. But the opposition seems to belong rather to the outer surface of things, and not to their essential character. So long as we find opposition we may be pretty sure that our conception of beauty is too superficial; and it may be that our conception of morals is too superficial as well.

The latter half of the nineteenth century has taught us some lessons which bear upon this question. There has been a marked tendency in recent thought to get nearer to the heart of moral character, and to judge it somewhat less by outward and conventional signs. And painters and sculptors have been showing us the beauties hidden in the common things of nature and of human life. We have learned to turn away from pink Venuses and pretty Cupids to find a deeper pleasure in studies of sand dunes and fishermen and laborers in the field. These are changes of vast significance in the history of human culture, and they bring our ideas of beauty and of righteousness nearer together.

May we not say that the end of all æsthetic culture is to attain unto a true appreciation of the "beauty of holiness"? Someone remarked of Archbishop Laud that when he spoke of the "beauty of holiness," "he meant no more than decorum in public worship, the beauty of a well-ordered church and of proper intonation and genuflection." It may be that in different ways our own conceptions are as superficial and inadequate. But the moralists and the artists are little by little leading us to a more perfect understanding.

And it is to be hoped that the scientists and philosophers are leading us by slow degrees to a fairer view of the relation of truth to the other ends of the highest human endeavor. The nearer we get to the ultimate heart of things, the more intimate union do we find between the good, the true, and the beautiful. It is only by drawing near to the heart of things that we can gain that pervasive kind of culture which goes forth with the man into every field of activity which he may enter; because it is only in this way that we can transform the man himself, rather than some mere patch or province of his being. Essential goodness and essential truth belong to the heart of things, and in them we find elements of such

universal culture. But essential beauty has a charm all its own — a peculiar freedom and vitality which we cannot do without. Let it have full and free recognition in the education of our people. It will help us to escape from the dull erudition of the schools. It will help us to transform our crude wealth of material goods into things of spiritual value. It will ennoble all departments of individual and national thought. Let it work out with us its proper work.

THE RELIGIOUS ELEMENT IN THE FORMATION OF CHARACTER

BY RT. REV. GEORGE MONTGOMERY, BISHOP OF MONTEREY AND LOS ANGELES

As a citizen of Los Angeles it affords me particular pleasure to welcome you to our city and state. Many of you have crossed the continent to visit us. I hope that after the labors of the convention are over your stay among us may be sufficiently prolonged to make your visit both pleasant and profitable. And I beg leave to thank the association for the honor of being one of those to address so distinguished a body of earnest and intelligent men and women engaged in the great cause of education.

I have selected as the subject of my paper "The Religious Element in the Formation of Character." I have done so, first, because I believe it is the settled conviction of all true educators, as well as of all other intelligent and thoughtful persons, that the formation of character is the most important part of education; that, in fact, no amount of merely intellectual or scientific training is of much real value without it. I have chosen this subject, in the second place, because I believe that the religious element is the most essential factor in the formation of character. A third reason for choosing it is the fact that, as I am speaking to the largest and most representative body of teachers in the country, I can explain to the whole country, thru them, the reason why the church to which I belong feels it necessary to establish and maintain a system of private schools. I believe this explanation is useful.

Ladies and gentlemen, we have honest differences, along with strong and common ties that bind us forever into a common fraternity. We have here a common country toward which, and for whose institutions, we are bound together by the bond of undying love, and whose great strength is found in the harmony and good will of all its citizens; and I feel that what I shall say will serve to cement that love and concord.

I believe that every child in the land should receive an education; I believe that a system of public instruction such as ours should be absolutely non-sectarian. From these principles I infer the necessity of private schools.

It is a fact known to all well-informed persons that in the beginning of our government all schools imparted religious instruction along with secular training; and that non-sectarian schools were a compromise, seemingly rendered necessary for the sake of peace, and to maintain religious liberty among us. But the non-sectarian school was never intended by its originators as a protest against private schools, or to undervalue religious instruction in education. Like the freedom of speech and freedom of the press, religious freedom is one of the corner-stones of the republic. Our revolutionary forefathers, the framers of our constitution and the builders of the republic, were almost invariably men of strong religious convictions; and while they prized religion as they ought for themselves and for others, realizing that some of their fellow-citizens set less store than they did upon dogmatic religious training, and that among believers themselves there were many honest differences, they felt it necessary to make this compromise upon a secular and non-sectarian system of public instruction, leaving it optional with those who might wish to do so to establish and maintain private schools, in which, along with identically the same secular training as that given in the public schools, religious instruction might be imparted according to their respective beliefs.

That education is best which best fits men to discharge the duties of life. Among those duties are the duties we owe to society; and these are common to us all, no matter how much we may differ upon other subjects. To discharge these duties well education is necessary; and as in our form of government we all, at least theoretically, share in governing, that education should be as widely diffused as possible; hence we try to make it universal. My contention is that in the education fitting us for these duties religious training is the most essential element. I think the proof that a non-sectarian system of public instruction is no evidence to the contrary is found in the significant fact that, from end to end of the land today, a cry goes up from the ablest statesmen among us that there should be more religious instruction in the schools. But the moment that religious instruction is attempted, that moment they cease to be non-sectarian, for there is no such thing as a non-sectarian religion.

When we of the United States speak of society, and our duties to it, we mean the society which we see and know in daily life, the society of which we are a part; and our duties are duties which have to be discharged here and now. Our government declares that we are, as men, entitled to certain privileges, such as life, liberty, and the pursuit of happiness, and it promises to secure these things to us. But as government is simply society in its active, concrete form, we have to create such a society that it will make good its promises.

In our idea of government we substitute the ruling of the many for

the ruling of the few, in order to bring government close to the people. We have brought it as close to them as any government on earth. Theoretically the government is in the hands of the people, but practically this is only partially true, for, after all, the business of governing is delegated to a few. The farmer, the merchant, the mechanic, the day laborer, the professional man have to delegate their share of the actual work of governing to representatives. This they do by the ballot. Once we have chosen our representative, the legislator or the judge, our dictation ceases. We have to depend upon their integrity, their honesty, their character, their conscience, in doing our work.

There is, therefore, something higher than and anterior to law, to courts, to written constitutions, to which we must look for faithful service. That something is character, or conscience. If our representative misrepresents us, we may retire him at the next election, but we cannot take his place and do the work ourselves, tho radically any one of us has the right to do so. But we have to select another representative from the same body politic; and so this universal round goes on, and we have absolutely no other guarantee than that of his conscience that our new delegate will fulfill his trust any better than his predecessor.

Now, I say, this sort of conscience or character is built upon the foundation and framework of religion. The authority that I shall quote to maintain my thesis no man can call in question.

In his farewell address to the American people Washington asserts all this most clearly and most forcibly. He says:

> Of all the dispositions and habits that lead to political prosperity, religion and morality are indispensable supports. In vain would that man claim the tribute of patriotism who should labor to subvert these great pillars of human happiness, these firmest props of the duties of men and of citizens. Let it simply be asked: Where is the security for property, for reputation, for life itself, if the sense of religious obligations deserts the oaths which are the instruments of investigation in courts of justice? And let us with caution indulge the supposition that morality can be maintained without religion. Whatever may be conceded to the influence of refined education on minds of peculiar structure, reason and experience both forbid us to expect that national morality can prevail without religion.

Here Washington does not tell us that the protection for property, for reputation, for life, depends upon extent of territory, fertility of soil, salubrity of climate; or upon commerce, trade, large standing armies, and great navies; or upon our matchless constitution and the laws made in the spirit of it; or upon universal and refined education. No, not upon any of these, nor upon all of them together; but upon the simple, silent principle within the soul—the religious obligations of an oath. Every official selected by us to do our work raises his hands to heaven and solemnly promises God to be true to the trust reposed in him, and we have no other guarantee that he will be true than the religious obligations that he attaches to that oath.

What is the meaning of an oath? What are its religious obligations?

1. An oath means that there is a God.

2. That he is a living, all-seeing, personal God.

3. That men owe him obedience and service.

4. It means, above all, that there are future punishments and rewards in the next world.

The sanction of an oath is that God will punish the perjurer. No one expects to see him visit the perjurer with instant and condign punishment; but the very idea of this sanction is punishment hereafter.

What value has an oath in a court of justice, if the one who makes it does not believe these things about it? What security does it offer to property, reputation, and life? According to Washington, absolutely none; and the making of an oath under such circumstances is done under false pretenses and becomes a blasphemous fraud. When Washington tells us that in the religious obligations attaching to an oath is our only security for property, reputation, and life, he speaks as a man of religious faith, and declares to be true all that I claim.

The religious element, then, is a most potent factor in the formation of character.

I know there are those who speak beautifully of religion today, but who want religion without theology, or a creed. Ladies and gentlemen, when we can have mathematics without the multiplication table, and literature without the alphabet, we may have religion without a creed. A creed is simply a dogmatic truth, or a series of dogmatic truths. The man that believes in God has a creed. The man that believes in the religious obligations of an oath has a creed, and no small one at that, dogmatic and binding upon his conscience.

To teach religion it must be taught with authority, because it carries moral obligations with it. It has been well said that, if the theorems of Euclid carried moral obligations with them, men would be found to doubt or deny them. The authority that teaches religion must be able to say: "Thus saith the Lord God of Hosts."

Society is not a mere compact between men to live together after a certain fashion, for certain purposes, as two or more men enter into a partnership to conduct a certain business. We hold that society is divine in its origin; that God is its author, and that there is no power but from God. We believe that God has left men free to choose whatever form of government suits them best, but that, having once chosen it, he confers upon the selected rulers the right to rule; for, radically, no man has an inherent right in himself to rule over other men; and while it is true that governments "derive their just powers from the consent of the governed," it is true because God has been pleased that power should come to the ruler from him thru the people. No matter what the form of government may be, the purpose of it is the general good, and this society being divine, God

has established it and rooted it in conscience, and conscience based upon religious teaching. Here I speak not as a religionist, but as a simple citizen.

The state, as such, having no religion, has wisely declined to teach religion; but as its founders and promoters have recognized and do recognize the absolute necessity of religion for the welfare of the state, for the protection of property, reputation, and life, the private school, where religious instruction is imparted along with proper secular training, must ever be regarded as a strong bulwark of the nation.

Man is made up of a complex nature. He is a physical, intellectual, and moral being, all in one; and the man perfectly educated is the man educated in his whole being; and as God has united these elements of his being, we feel that we cannot separate them without detriment to the individual and to society; and education being so much a matter of youth, we feel that their development must go hand in hand.

Ladies and gentlemen, we are passing thru a critical period of our national life. We began as a nation imbued with the right principle that the laws of God's eternal justice are the basis of that equal and exact justice that must be meted out to the humblest citizen in it; and there is today, on the part of the vast majority of our people, a strong and growing persuasion that we have departed from it, and that selfishness and greed are the gods that have a controlling influence. We must be able to disabuse them of this, if it is not a fact, or correct it, if it is a fact; else no man can foresee the ruin that shall overtake us. It cannot be denied that material wealth is the god of many.

Manhood and virtue do not count for what they once did. That these may regain their rightful sway, this generation, and those to come after us, must be taught that there is a higher life than this material world. If we are but a part of this great material universe, we differ from the inert clod of matter only by some chemical combination. This furnishes no ground for pride or ambition. The dignity of man is not in what he has, nor in what he knows, but in what he is; and he is something more than this. More than two thousand years ago the wise man said of the materialists: "They have said," reasoning with themselves, but not rightly, "the time of our life is short and tedious, and in the end there is no remedy. For we are born of nothing, and after this we shall be as if we had not been: for the breath in our nostrils is smoke, and speech a spark to move the heart. . . . .. Come therefore and let us enjoy the good things that are present. Let none of us go without his part in luxury, for this is our portion and this our lot." (Wisdom 2:1–9.)

This reasoning, the wise man tells us, is not right. Man is not this, or this is not man. There is a prototype after which he must strive with his whole being. Man is of both earth and heaven. He is an animal, but a rational animal. Into his body there has been breathed a living

soul. That soul is made after the image and likeness of God. That soul must be made as nearly as possible like to God, after whom it is imaged. That cannot be done on intellectual lines only. He is intellectual, but he is much more. He is an intellectual, a moral, a religious being, all in one, and this moral nature is superior to his intellectual nature. The common voice of mankind attests it. The laws of his moral being must control his whole life, else anarchy will reign in the individual and thru the individual in the social body. To love is higher than to know. To love is the end of the law. "Thou shalt love the Lord thy God with thy whole heart, with thy whole soul, with all thy strength and with all thy mind, and thy neighbor as thyself." From these spring the laws of God's justice, between man and man, and no human contrivance can substitute them.

We claim, and justly claim, that our civilization is a Christian civilization; and if we wish to perpetuate it, we must keep the principles out of which it has grown.

Christ came into the world in the golden age of Rome. Grecian and Roman civilization had exhausted the resources of merely intellectual culture, and yet Roman civilization was rotten, because it had no moral basis. Christ found mankind the slave of false principles. He came to give man new hope and to point to new purposes. He came to elevate the race. He did so by becoming one of the race. He assumed human nature and united it to the divine nature. What he did, then, for man was not as man, but as the God-man. This is the fundamental principle of Christian faith, the fundamental principle of Christian civilization.

Christ found labor degraded. He elevated labor and the laborer, by becoming a laborer himself. He found the home and family, the wife and mother degraded. He dignified home and family, wife and mother, by choosing for his own mother, in becoming incarnate, one of the race. Henceforth the home and family were sacred. Henceforth the wife and mother should no longer be the pagan slave of a pagan husband, but she was to be the queen of his household and the honored mother of his children.

Ladies, whenever you see a picture of the Madonna and child, put upon canvas or sculptured in marble, you see the emblem of your emancipation and your redemption.

These are leading characteristics of Christian civilization, and these are truths that must be taught, if we hope to perpetuate Christian civilization.

The man that proclaims Christ as man only undermines the very fundamental principle upon which Christian civilization is based. Nay more, he proclaims Christ himself an impostor, for Christ declared himself to be both God and man. And, furthermore, Christ held out to man a new hope in this: He promised that the wrongs done by men in this world

should be righted in the next world, at least, by a species of rewards and punishments. He made the cause of man his own cause, and the denial of future rewards and punishments cuts away the foundation of Christian civilization. The man that denies these sacred truths and yet proclaims the glories of our civilization knows not the foundation on which it rests. Take out of man's heart and soul the belief in these sacred truths, and the civilization that has been built upon them must fall.

THE DEVELOPMENT OF MORAL CHARACTER

BY G. W. A. LUCKEY, PROFESSOR OF PEDAGOGY, UNIVERSITY OF NEBRASKA

Progress in civilization is the result of man's continual effort to realize himself in higher and nobler conceptions of life. Change is written everywhere, stability nowhere. Life means change from within; death, change from without. From this law of nature there is no escape; but thru it man is to become free indeed.

There are periods in which the forces of nature and of mind seem to be acting in closest harmony, and these are the periods in which the onward movement is most pronounced. It is well for the individual if thru all these changes he continues in harmony with the highest conceptions of his age and brings his efforts to bear in the direction of true progress.

Among the encouraging features of the present social movements is the greater interest manifested in the development of the child, including the closer scrutiny of all human actions. This has led in part to the so-called moral revival which is spreading thruout the country and bringing into closer alliance the various reforming forces. Our schools are to become something more than institutions for the turning out of intellectual prodigies; they are to be instrumental in making *men* and *women*. But how can the struggle for existence be lessened and the individual given time to make himself and others happier? This leads us to the thought of the hour—"The Development of Moral Character."

In the United States upon the public schools alone we are spending nearly two hundred million dollars annually for the education of the people, and this does not include the large sums expended upon the many private and higher institutions of learning. Why all this expenditure of money and of time, if not in the hope of making individuals better, more efficient in life, more considerate of others, purer, and truer?

If the purpose of education is to give skill and power without increasing the individual's nobleness of character, it will not in any way relieve the struggle for existence which is becoming so intense, but, on the

contrary, will increase it—simply removing the burden from one by placing it upon the shoulders of others.

All education should tend to make the individual more of a man, as well as more efficient and more useful both to himself and to others. For this reason, whatever be given as the true aim or ideal of education, the development of moral character will always play an important and ever-increasing part.

In that series of commendable articles on "Modern Education" published in the *Cosmopolitan* for the year 1897–98 the principal idea of modern education, as set forth by the various writers, may be summed up in the following words of the editor, John Brisben Walker: "There is no other basis upon which any tenable theory of education for youth may be built than that the training received tends, in the highest degree, toward those conditions of mind and body which will best serve to bring happiness to the individual educated and to those about him." This also calls attention to the importance of character, for true happiness comes as the result of overcoming real difficulties and of bettering the condition of others.

The term *character*, like so many other words in the English language, has grown to include such a variety of meanings that it is difficult of exact definition. At first the word meant simply the stamp used for engraving; next, the mark or figure engraved; then, the separate letters or figures; and later still, the peculiar or distinguishing features of letters, figures, or objects. It is in this latter sense that the term has come to be applied to individuals. Looked at from this broader standpoint, character represents all that combination of qualities, traits, and habits which distinguishes one individual from another. Under this head come health, physical features, form of body, attitude, manner of movement, disposition, voice, intellect, sensibility, judgment, will. Character represents what the individual really is, in feelings, in thought, in action, determined by heredity and by what he has been. It is the living personality or individuality of a man; in other words, the distinguishing qualities of a man in action.

We often hear it said that the character of the people is becoming weaker, that the men of our times lack decision, purpose, courage, perseverance, discipline, and religious convictions. It is said that in China, where the conditions of society show a more primitive stage of civilization, there is more marked obedience and greater respect shown to parents, to superiors, and to the aged; that in mediæval times men showed more indomitable wills and followed more tenaciously the path of duty as indicated by their leaders. Even our New England ancestors are frequently quoted as examples of men and women showing greater strength of character. Their faithful adherence to what they thought was right, their self-reliance and severity of discipline, their indomitable

purpose and religious zeal are all given as indications of their superiority of character.

But before accepting these statements as final we should consider the age in which we live. Ideals and conditions of life have changed. We are living in a different age, under a new sky, and breathing a different atmosphere. Civilization has carried us forward. We could not go back if we would, and we would not if we could. It is our duty to adapt ourselves to the conditions that exist, bettering them when we can, and our character is shown by our ability to do so.

The servitude of the past has given way to individual freedom. Belief in the divine rights of kings and of self-constituted leaders has given place to individual conscience. In that earlier time the character of the people was represented by the character of their leaders; the masses knew but little and usually cared less:

> "Theirs not to make reply,
> Theirs not to reason why,
> Theirs but to do and die."

Today all are leaders, and the individual conscience, as rightly understood and properly developed, is justly considered to be the only true guide. As individuals we are *free*, and our *success* or *failure* is to be determined by *our own* action. This conception of life has greatly increased the versatility of the people and the strength and importance of character. The masses have become individualized, and the motive for action has changed from the voice or authority of the leader to the promptings of the individual conscience.

Every change in ideals or the breaking away from old and established customs to accept new and untried conditions is sure to bring about a period of unrest, a vibrating from the one condition to the other. It is this readjustment of society, this changing of ideals, that many have noticed and mistaken for weakness of character, when in reality it is only one of the natural processes of growth, an overcoming of difficulties, a breaking away from the dead or decaying forms of the past, that indicates strength rather than weakness of character. If character really means the distinguishing qualities of individuals, the personality, the originality, the independence of thought and of action, the nobleness of purpose, the persistence of effort, the faithfulness to duty, and the loftiness of ideal, then there is a greater degree of character manifested today than in any other period of the world's history.

It may seem that we do not have as many distinguished leaders today as in some of the more favored periods of the past, but this is more apparent than real, and is due to several causes; first, under the changed conditions of life the occasion has not demanded such leadership; second, where the individual opportunities are so great, and where all have equal chance of becoming leaders, the difference between the few and the

many is not so apparent; and, third, in a state of society where the masses have become imbued with such an amount of versatility and individuality it requires much more talent and skill to become an efficient leader. He who would be a leader today must bring his thought and life in touch and harmony with the highest ideals of the people, and it is only when we touch great truths or rise to lofty conceptions of life that we can hope to have any unanimity of action. But when such occasions arise, as was the case in our recent war with Spain, we do not need to fear for the necessary leaders, nor for the strength of the character of our people. The great diversity of opinion manifested on nearly every subject of conversation is lost for the moment in the unity of thought and feeling which comes from touching a higher and more vital conception of life. Heroes are not made in a day, but the opportunity to give expression to their character may occur without a moment's warning. He who thru years of thoro preparation, self-denial, and honest living has laid the foundation for true greatness, like a Dewey or a Hobson, is ready for success whenever the opportunity offers. Tho we should not forget the true hero is as courageous in battling against small as against great evils.

The character of every community, as well as of every nation, depends upon the character of the individuals of which it is composed. It can neither be better nor worse. Would you know the character of any society, determine the character of its members; would you better the condition of any community, begin by bettering the condition of the individual members. He who would reform others may well begin by reforming himself, for society is so constituted that every change in the individual character is sure to continue until it has permeated the whole.

As to the time when we should begin to develop the character of our children, I agree, in part, with Aristotle when he says the state should begin the education of children before the marriage of their parents. Before birth and before prenatal life the formation of the character of the child rightly begins. Common-sense in selecting life-companions, proper cultivation of mind and heart, congeniality of home surroundings, and careful observance of the laws of health all tend to strengthen the character of the offspring.

Of the two great factors in education, heredity and environment, the former is but slightly under the control of even the parents, while the latter may be almost wholly so; besides, the latter is usually far more influential in affecting the life of the individual. Thru the accumulated experiences of many generations we have inherited a certain form and constitution of body, a special arrangement of muscle and nerve fibers, certain physical features and ancestral traits, peculiar forms of tissue, muscle, and nerve cells, and such further changes of body and brain as are purely somatic in character. But these represent only the form of life and the possible direction which education is to take. The real spirit and breath

of life is not to come thru heredity, but thru nutrition and environment. What is often attributed to heredity is nothing more than a weakened condition of certain organs or groups of nerve cells, which has resulted from insufficient nourishment at the proper moment. This weakened condition or predisposition, if taken in time, may usually be overcome by careful attention to diet and surroundings.

Were I to name the three most vital periods in the life of the individual, I should designate them as the prenatal period, the period from infancy to five or six years of age, and the period of adolescence. During prenatal life, when the various cells of the body are developing, and when every change in nutrition is sure to be felt in the delicate and rapidly growing nervous system of the child, it is all-important that the general health and happiness of the mother be preserved with the greatest care.

Passing to the next important period of the child's life, the one extending from birth to at least the fifth year, we enter upon the first period that is usually taken into consideration in education, and even here the lack of attention is almost criminal. During the first five years the individual has lived faster, learned more, and established a greater degree of character than will be possible again in any other five years of his life. He has grown to nearly six times his size at birth, and his brain has reached almost its full size; he has acquired the power of balancing his body and of easy locomotion; he has learned to use his muscles and his special senses with considerable accuracy; he understands his mother-tongue and can use it almost as fluently as those about him; he can converse on a great variety of topics, and can mimic the calls of familiar animals more successfully than his adult companions; he has learned to observe and interpret nature and to adjust himself to the conditions of his environment; he has developed a certain degree of secrecy, of inhibition, and of will-power; he has become somewhat sympathetic in his actions, or the reverse. Thru imitation he has taken on many of the habits and much of the character of the life about him; his imagination has become aroused and can no longer be confined to its local surroundings. Thru fable, thru story, and more thru his innumerable questions, he shows to the world the intensity of the life he is living. What years these have been in the formation of character, and how cruel to allow them to pass with scarcely a thought of their importance! The years of childhood come but once, but the lessons they teach and the experiences they give can never be eradicated.

Character represents the *whole man*, and *true character* means the *harmonious development of body, mind, and soul.* The importance of this statement is only half appreciated. It means, first, that character, like morality and religion, is not something which can be assumed or rejected at will. It is the very essence of the individual's life, and can only be changed or modified with the life itself. In the second place, it means

that the physical condition, the health, growth, and strength of body greatly affect the individual's character. Everyone must have noticed how much more irritable he becomes during times of fatigue and ill-health. Indigestion, if persistent, will turn a saint into a sinner. Would you establish noble characters in your children, begin by laying foundations for strong and healthy bodies. Food, clothing, exercise, sleep, rest, and sanitary surroundings are of more importance to the child's future life and character than most of his school exercises combined.

Everyone who has given the subject thought must have been convinced of the physical basis of character. Not only the physical features, but all the muscles of our bodies indicate the lives we have lived. An oft-repeated act becomes a habit, and habits determine character. The soul has no other means of expression than thru the muscles of the body. Not only what we see and hear, but every lesson, every play, every movement, every feeling, and every thought leave their permanent impress. This is not a discouraging feature, but the reverse. It means that all our future activity may be made to strengthen our characters and purify our lives.

The molding of character takes place more rapidly under conditions of health and of interest. The latter becomes an important factor in all education, and furnishes the best means of approach to the real life of the individual. It is for this reason that play and the street life of children exert such powerful influence. More study must be given to the *interests* of children, if we desire to become efficient in our teaching.

Having indicated the importance of good health and of a sound body in the development of character, I desire next to mention the necessity of having well-trained senses. As all of our knowledge of the external world comes thru the senses, it is important, first, to know that they are normal; if not, the extent of the defect, and how best to counteract it; and, second, to have them so cultivated that they give us quickly and accurately the knowledge for which they are adapted.

The first steps in the training of the senses naturally belong to the parents in the home, but the work must be further continued and brought to a higher degree of perfection by the teacher in the school. The processes, however, in so far as they cover similar ground, should remain the same in both cases. The method by which the child, under favorable circumstances, reaches such a high state of development in his powers of observation during the first five years of life should be continued when he enters the schoolroom. Surround him with material, stimulate his interests, make subtle suggestions, but allow him to do the rest.

The character of the individual is affected, not only by the nature of the senses, but also by their state of cultivation. In the schoolroom, besides the training in observation, must be the careful training in the classification and expression of knowledge. This leads naturally to the

next step in the process — the proper development of the intellect. Perception, memory, imagination, judgment, and reason are but so many parts of the individual's life and character. Strengthen these and you strengthen all. Teach the child to become a careful observer of the phenomena of nature, to classify and remember the important features, to discover present relations and invent new ones, to make accurate generalizations, and finally to express his knowledge in clear but terse English, and you will have given the foundation for a strong character. A highly developed intellect will not by itself produce a man of sound morals; nevertheless, no matter how pure the individual's intention, unless he possesses sound judgment he is sure to become a weak member of society.

Another important consideration in the development of character which should not be overlooked by the teacher is the culture of the feelings. At the foundation of all sensation, deeper and more subtle than intellect itself, is feeling. Intellect without feeling is cold and dead, while sensation without feeling would be an anomaly. In actual life it is impossible to separate the feeling element from sensation, intellect, and will; nevertheless we often find the sensibility — the primitive source of all mind and the present mainspring of human action — so perverted in the process of education as to be wholly untrustworthy and out of harmony with the rest of the individual's life.

The proper cultivation of the feelings is as legitimate a part in the problem of education as the development of the intellect, and usually far more essential to the future happiness of the individual. It is neither sentimentality on the one hand nor lifeless reason on the other, but a proper commingling of both, that produces the highest form of character.

It is usually when under the influence of deep emotional excitement that men obtain glimpses of higher ideals. Such moments are termed moments of inspiration, and are usually the result of great struggles, of intense interest, or of long-continued effort, in which the real self is lost in the ideal, or when the subconscious life becomes for the moment the controlling influence. Having once gained a view of a nobler ideal, it is next necessary to bring the mind, and, in fact, the whole life, into harmony with it. Herein lie the elements of true genius.

But how shall we know that these moments of struggle or emotional excitement have given us higher, instead of lower, conceptions of life? We must now fall back upon judgment and reason; if the ideal is higher, the reason will recognize it and endeavor to conform to it; if lower, the intelligent reason will reject it. Here, again, we see the importance to character of a well-trained intellect. While reason itself may never become the factor thru which noble ideals are divined, it is the means by which they are truly recognized and maintained. Thru the feelings and emotions we commune with God, but it is thru the will and the intellect that we bring our lives into harmony with what is noble in our ideals.

The ethical and religious emotions are all subjects of education. It is by surrounding the child with what is beautiful in nature, and pure and noble in life, and by stimulating his interest in observing and describing the same, that we teach him to love the beautiful, the good, and the true. In all education the teacher must be guided in her efforts by the interests of the child. It must be a growth from within rather than a filling up from without, an assimilation and an appreciation rather than the mere accumulation of knowledge. The teacher must become familiar with the content of the child's mind upon the particular subject in hand before she can hope to guide him logically and intelligently to the next step.

We approach next in the development of our subject to what has wisely been termed the greatest power on earth — the human will. Thru it man harnesses the forces of nature, removes mountains, builds cities, connects oceans and continents, overcomes space, controls society, and conquers self. Without it he becomes a mere tool in the hands of others, unable to rise above the influences of his immediate environment and incapable of individual progress. It is the will that gives force to character, strength to manhood, and purpose to life. No permanent success is possible to him who lacks in courage and self-determination. The will, however, has its beginning, its growth, and its more or less perfected state. These facts must be taken into consideration in the development of character.

The first movements of the child are involuntary — spontaneous, reflex, or instinctive — and devoid of anything that can be properly attributed to will. But these early involuntary movements produce sensations, leave impressions, and furnish ideas by means of which the will comes to be established. Will, therefore, is the outgrowth, first, of involuntary or aimless movements; second, of sensations, perceptions, and ideas accompanying or called forth by these movements; and, third, of a desire to continue or to reproduce the pleasurable states and to avoid the uncomfortable ones resulting from the above changes. Again, will is not only the cause of action, but is itself strengthened and developed thru action in which the individual is compelled to take the initiative and decide with reference to the course to be pursued.

As voluntary movements always depend upon former involuntary ones, the first step in the development of the will is to surround the child with proper conditions of life. Sufficient nutrition and healthy environment are sure to call forth innumerable movements, both natural and pleasurable, laying the foundation for versatility and evenness of disposition. In the second place we must religiously avoid all duplicity of character, and prevent as far as possible such conditions of the environment as produce in the child confused or irritable states of mind. Will is the directing force of the individual, and manifests itself alone in action (inhibition being but a form of action); but in order that this action may be wisely planned

and properly executed, it is necessary that the will be tempered with genuine sympathy and intelligent judgment. Strength of character, as indicated before, depends upon the harmonious development of the whole man.

The factor that has most to do with all voluntary action is imitation. We grow to think, to feel, and to act like those with whom we have been closely associated. For this reason it is of vital importance that we place before the child such lives and such examples as we would have him imitate. The mother whose actions belie her words may be ignorant of the result, but she is laying the foundation of duplicity and double dealing in her child. The teacher whose words to the superintendent or visitor are such as to indicate to the children that she is misrepresenting the truth is sowing the seed of falsehood and dishonesty which will ripen soon into an abundant harvest. Every thought, every word, every movement of the teacher is weaving itself into the warp and woof of the individual character of the children. Set no examples, either in private or in public, that you would not have your children follow.

Having thus outlined as requisites of an ideal character *good health, a sound body, a thoroly trained intellect, keen sensibility, pure motives, and a well-developed will*, I should add at least one other requirement — *a lofty ideal, with sympathy and love for humanity*

The best measurement of character is the individual's ideal, but we are not always safe in measuring his ideals by his outward professions, for his actions frequently belie his words, and the truth lies deeper and is only partially revealed by the surface indications. No one's character can be represented by a single act, neither does a good man fall thru a single temptation. Could we look closer into the life, we should find that it was because evil thoughts were permitted to take refuge in the brain that they became sufficiently strong to work the ruin of their master in some unguarded moment. Permanent ideals are not obtained thru mere fancy, but are the results of the slow processes of growth, in which the experiences of the individual have furnished the foundations, and the creative imagination has accomplished the rest.

It is well to remember that the principal material from which our ideals are obtained is furnished us thru the lives of others, whether it be thru actual associations, or as recorded in history, or sung in story. From parent to teacher, from teacher to companion, from companion to typical character, or back to parent again, the ideal of the child is vibrating. Whoever, for the time being, is the embodiment of the child's better self, tho possibly unconsciously, yet nevertheless truly, is shaping his future life and character.

No one need be ashamed of his position on any subject if it represents his highest ideal, and he cannot afford to have it represent less. He who would succeed dare not be untrue to his ideals and live a dual life, and

neither is it necessary, if his ideal be formed in accordance with divine harmony. With conscience and right on our side, why need we fear for the outcome, when we measure our strength in battle with evil? If our ideals are right, and our God be God, we need not fail. If we do fail, our ideals must be wrong, or we lack force and are unworthy of them.

No one ever dreamed himself into a noble character; for character is active, not passive; but by patient and untiring effort he may make of himself what he will and remain secure in the face of storm and of danger. Would you overcome a fault, substitute a higher activity in its place, and guard well that there be no reversion until the new has firmly taken the place of the old.

I do not believe that God has given to man a nobler or more responsible calling than the teacher's profession, but all labor that has for its aim the amelioration of mankind is honorable and worthy of man's highest endeavors. The carpenter at his bench, or the shoemaker with his last, may be serving God and benefiting mankind as truly as the minister in the pulpit or the teacher at his desk. "By their fruit ye shall know them."

Life is a transition. The generation that is has gathered its inspiration from the generation that was, and must give in turn its spirit to the generation that is to be. For the time being we hold in our possession all that there is of life and of character, and we can offer to posterity only what we possess. To gather, to conserve, and to extend the best thought, life, and character of the present generation to peoples yet unborn is the highest mission of the race.

EVOLUTION AND ETHICS

BY PROFESSOR SYDNEY T. SKIDMORE, PHILADELPHIA NORMAL SCHOOL

Every person normally conditioned has an abiding faith in the fact of progress. The optimist and pessimist may differ widely in interpreting events, but both alike believe that Omnipotence walks eternity with positive steps and does not merely execute a round-dance upon it.

"I hold it truth with him who sings
To one clear harp in divers tones,
That men may rise on stepping-stones
Of their dead selves to higher things."

Seldom, however, does this faith shine out with undimmed ray. There is a companion doubt which arises from human limitations and, in a measure, obscures it:

"But who shall so forecast the years,
Or find in loss a gain to match,
Or reach a hand through time to catch
The far-off interest of tears?"

Thus expressed in the finest form of poetic art we have a matter of very common experience and one of the strongest tones in the murmur of humanity. We believe in progress, but we may not, alas, enter fully into the fact of it because its periods are too long for the measure of our years. We give much attention to retrospects and know but little of forecasts, and so miss the meaning; for nearly all interpretation of the past lies in the future. But little relating to our kind has filled out into fully rounded being, because our race is still very youthful. Its main history is yet to be written. Its career is of the future and not of the past, since the bloom of the cheek does not more surely indicate physical youth than does the bloom on the generic soul of this faith in progress indicate that it is young and looking forward to an expanding rather than a contracting future.

The signs all point one way. So long as the effort is to transmit more to posterity than has been received from priority, and individual ambition for wealth and power overrides all other considerations; so long as justice, equity, and honor are conjuring terms in the service of arrogance or rascality; so long as government is so crude that it must do the things for which it punishes its subjects, in robbing robbers and murdering murderers; so long as the nations, like jealous wolves, are parceling out among themselves the cowering flock; so long as the world's population is doubling each century, and almost the whole of nature's resources are still unutilized, we may fairly believe that the end is very remote. Matters like the foregoing are growing pains rather than effects of disease, and indicate rudiments rather than infirmities.

Advanced civilization is a long distance from savagery, when regarded in one way, but, as compared with the road yet to be traversed, it has not advanced very far. The test appears in its pleasures. Its gratifications still reach after trinkets, ornaments, odors, sounds, colors, and fantasies of thought and form, which it is pleased to deify and adore as Beauty.

The much-discussed "problems of evil" grow out of our ability to think of better things than either do or can exist as uniform reality. There are no evil things. Some things are better than others, and most things are better in ideal than can appear in the garb of material circumstances.

That there is a duality in human nature is a matter of the commonest understanding. How it has come about, and how the combination is to be interpreted and treated, are not matters of such common agreement. In a general way, and for purposes of discussion, we may term that factor which appears dominant in animals, animalism, and that which confers distinctiveness on the best-developed humanity, humanism.

These form an inseparable blend in human nature, and the tone of this blend depends on the proportion of each which it contains. As practical educators we seek to strengthen the humanism and make it

absolute in the type, and this strengthening is what we term in this writing ethical development. The large responsibility which rests with us is due to the fact that our lot falls in the opening chapters of the race. We are co-workers in the dawn of the human day, and view directly the advancing train of that ethical Eos which shall brighten to its perfection. When it shall have reached high noon, moral development as a part of the teacher's work must end; then will be the time for the teachers to turn the race over into the hands of its doctors and undertakers.

Meanwhile, let us either agree, or agree to disagree, about the cause of these things in humanity for which we now seek remedies. Our ethical doctrines and practice must be profoundly modified by our understanding of such cause. Is it rudimentariness or sin? Is it because of something that the Lord has not yet done in creation, or something that the devil has done? Is it human nature ungrown or human nature in ruins? I am compelled to vote for the first of each of these propositions. Is the fundamental task of morals the formation of human nature or its reformation? I believe that ethical process is generative and not regenerative. All facts of being seem to support this view, and none appear against it. Diminishing qualities of the savage run forward into the civilized, just as do those of the anthropoid into the anthropos. The ascent is gradual, and wherever in the civilizing process men have merged portions of themselves into social pools, these pools still retain a suggestiveness of the former savage man and his more remote antecedents, the animal.

One illustration must suffice. What we know as stealth and protective mimicry in animals becomes cunning in the savage, and strategy or diplomacy in the civilized. From coarse to fine, it all belongs to one piece, to which lying, as a generic term, aptly applies.

As with persons, so also is it with institutions. We have laws and courts; but as the colossal figure of the goddess of justice comes before us on the screen, she seems to be of a substance so shadowy that the tattoed forms, the wild eyes, and the stolid victims of impulsive blows appear wrapped within the folds of her gauzy drapery.

The savage autocrat punished his slave by hurling at him the nearest missile. If the slave dodged it successfully, his deftness did much in appeasing the royal wrath; but if he stood and took it, he was stubborn and stupid; and, with us, the criminal at the bar who makes the truthful plea of guilty stands much lower in the eyes of the court and the eyes of the world than does he who makes the lying plea of not guilty, and maintains it with every device and deception with which legal art can delude a jury or becloud testimony.

We have schools for the training of character, and they are resonant with the music of moral maxims; but the movement does not follow the music. There is too much primitive instinct in mental plasma and motor

fiber for that. Practially the schools follow the scheme of the arena. It must be a wrestling match or an archaic contest of some sort in which the powers of children are matched against the wild beasts of mathematics, language, and science. How else could children be stimulated to activity, or how else could the judges rate the performance minutely on that percentage scale without which school-keeping could not be?

If the moral aptitudes and institutions of our race do not sufficiently affirm generic infancy, the geological records give strong affirmative testimony on the same question. As we turn over their stony leaves we read that a few thousand years have but little significance in making up the whole history of a genus. The remains of man are nowhere identified with any but the most recent formations. Geologically he is a newcomer upon the earth, and his genius has the time potentialities of millions of years before it.

Our most ancient history is but a thing of yesterday, yet it carries us back to times when there was only a little human seed scattered in wildernesses where great nations now exist. Never were people multiplying so rapidly as at present (about 1 per cent. per annum). This growth seems almost like an effort of nature to fill a vacuum; and still the earth is largely vacant. Our eighty millions may rise to six hundred millions before the United States will become as densely peopled as Great Britain, Germany, or France, and their increase — eight-tenths of 1 per cent. per annum — shows that they are not nearly full. There is room enough on the earth for the race to continue its numerical increase a hundred fold.

Civilization is rapidly taking possession of the world, and for those who will not accept it extermination is the fateful lot; but civilization is nothing other than the aggregated development of the power and significance of each human unit.

Turn to whatever field of evidence we may, we find the same thing affirmed. Our race is in its formative period. It is now struggling with its birth limitations; a new type of being is in process of creation, of which the like has never been seen in the world, and concerning which in futurity we can only speculate. In this worldwide growth of civilization an incessant remodeling affects everything. In nothing has the energy of the process worked out to a finish; of nothing does it seem to say, "This is very good;" "This is the end." Does not this ceaseless transforming mightiness rather affirm in effect, as it works toward its far future goal, that nothing that now is contains more than a remote suggestion of the finished humanism that it is creating? To those who listen it says: "Watch me while I work, and see, as one creative day follows another, how the ideal of humanism will appear, and the predominance of animalism will as gradually withdraw from the product until the perfected humanism shall display those definite qualities of being that make it as distinct from animalism as animalism is distinct from chemism; each

being in order of development the crown of the other, and resting upon its brow with regal significance."

Is not perfection the ultimate and universal dream, and can that perfection be any other than the focus of those lines along which intelligence and will are working thru ethical processes? They all point even now to a being that shall be supreme over the conditions and forces of nature within its sphere; not a flotsam being — mere driftwood of inherencies; not a slavish vessel of circumstances, with no control over them; but a regnancy that creates circumstances, rules over material manifestations, and is royally immune in nature from such assaults and peltings as the slave gets from the master, but never the master from the slave.

The worst delusion and enemy of ethical evolution is the doctrine of human degradation. Worst, because it gives to ethical sway neither room nor recognition. It construes the situation as holding a matured divinity enslaved by animalism, and thru redemption from its thraldom, by beating down the animalism, the nobler nature becomes restored to power. That is the ethical malpractice which the doctrine of degradation promotes; but alas! the nobler nature is not there, except rudimentally, and when developed by its own appropriate nutrients, it will reduce the animalism to its own proper and useful function. This is the true process of ethical evolution, the development of the human *over* the animal, instead of the coercion of the animal *in* the human.

The medicine that makes a sick person well makes a well person sick. Take up the teacher's burden. Is it a thing ethically sick, "born in sin and shapen in iniquity," and so morally diseased as to demand cauteries and antiseptics? Will goodness be developed in it by an awakened sense of its own badness and shame? Will it be lifted to nobility by flattery and threats, by rewards and punishments? Commands, threats, punishments, and petting are suitable in training dogs and horses; as applied to human beings such means are less successful than with animals, because human beings are more resourceful in deception and disobedience than animals. The animalism of the human may be somewhat ethically improved by such means, but its humanism not a bit, and they are no factors in ethical evolution.

As the move is made from selfishness, and the despotism that selfishness makes necessary, toward selfhood and the perfect liberty of law affirmed by the sovereignty of each person, the maxims of that despotism must die and all that promotes selfhood live and increase. More knowledge of things that are and less belief in things that are not; more enlightened will, less darkling wont; more love of truth and less untruth of love; more communion with nature and less sentimental gush over it; more beauty of holiness and less holiness of beauty; more rulership of being and less being of rulership; more of legitimate thought process and less hysteria of thought fantasy.

True ethical evolution is essentially the unfolding of a better understanding of the human as a principle distinct from the animalism organically associated with it; of a better understanding that this principle has its own nutrient elements, which are known and properly administered; that as it grows it dominates more completely the type in which it is contained, and that the best road to the goal of perfection is by maximizing the development of the humanism and minimizing to the utmost practicable degree the criminal treatment of the animalism.

At some point in the future those who then live will know what our thoughts were, and they will marvel that the curtains could have been drawn so closely around our understanding. To them our ideas of crime and sovereignty will appear as huge dark gnomes, standing together in the far-away dawn and stretching their black arms over a slumbrous earth.

With the teachers of the future reposes the hope of the remoter future. Here is the strange confluence of animality and rationality, the former losing and the latter gaining predominance as the centuries go by. An evolutionary process is acting upon and gradually transforming the likeness of the being out of the one and into the other. Whose mission is it to keep the way of this development open and free? The teacher's. Who other than the teacher will disappoint the hope and trust of the future if sodden ideas shall clog and institutional débris shall dam the course of this river of life, which should flow tranquilly between its banks of thought, and water as it goes the roots of those trees whose ulti-mannered fruit and foliage are for the healing of the nations?

To whom can we look for the operation of better laws? Not to jurists; for they have no deal with causation. They must make and interpret laws that shall match actual conditions and established facts. To whom can we look for better theologies? Not to the theologians; for theology, from an internal point of view, is not susceptible of improvement or revision. To whom can we look for better philosophies? Not to the expounders of philosophy; for they deliver their messages to the world, and the world does not understand them, and the world says to them: "Go up, you bald heads!"

These things are only possible to the teachers, who meet the coming generations at the threshold of the world and lead them into its habitations. If they know no better principles of government than can be gathered from legislatures and courts and old-fashioned concepts of sovereignty, and if they can devise no better incentives than are presented in the swinish scrambling of the world for personal advantage, they are neither priests nor priestesses of ethical evolution. If, still lower, with recreant selfishness and unworthy ambition they urge their charges along such ways and to such ends as will attract to themselves the greatest approbation of unskilled or thoughtless patrons, be they school officers or parents, such vassals and patrons are worthy of each other; they

create each other, and surround the holiest places of education with their miserable kennel of animality.

It is the right and the opportunity of teachers to know what none others can have the chance to know. Experience in the profession gives to them, or ought to do so, keys to ethical problems that are withheld from all others. Whatever is truest and best in the organic relations of human beings the schools are in a position to discover and put in practice, and the profession should maintain that steady, resistless power of expert knowledge in ethics which alone can face and bear down the conditions and vagaries of all the rest of the world. There is no scheme or doctrine of moral government that has the right to withstand the deductions of pedagogical science.

It may well be said by others, "We are confronted with conditions, not theories, and so we must act;" but it is not well for that to be said by any in the one profession whose business it is to mold humanity and create conditions. As well might soldiers say: "We are confronted by armed men, and so we must retreat." To submit tamely to conditions, and not strive to rule them by righteous reason, is to be an animal, straight out and out. Suppose Columbus had said: "I have to deal with a condition, not a theory." Suppose Galileo had said it. Suppose the men of '76 had said it. Leave that to be said by those who work by the hour and watch the clock.

This is addressed earnestly and feelingly to those who have now, or will have, some part in making the issues of the future. The quality of what such will do will be determined by the quality of their theory and the fidelity with which they work to its lines. What may be affected quantitatively is another matter; that, of course, is subject to conditions. For which of these is the ambition set? Is it for quality? The faces of such are fixed toward the glorious gates of ethical day. Is it for quantity? They have turned to their muck-rakes and their gauds—they are only commercial material, so much for so much; it is quality alone that advances evolution and crowns all sublimities.

To develop superior quality there must be a theory to work by and to live by. It must cover the essentials of being, and rest so directly and truthfully on the facts of being that it never loses its identity, however much it may grow or become modified. A properly held theory is one that best interprets and unifies the products of experience with the processes of reason and continually leads to more knowledge. In it that which is possible and that which is righteous meet together and set forth the best thing in act, so that righteousness is not everlastingly held under the hoofs of those brutal dynamics which work only for present advantage. It rises in absolute purity out of that to which it pertains, and is uncorrupted by the exhalations of irrelevant things far gone into decay, but still sending their effluvia up into human brains.

To those who are shaping theory concerning "evil" and its remedies the principal points of this paper are offered for consideration:

1. We rise in the scale of ethical being on stepping-stones within ourselves, and not by climbing over others.

2. Evil has no positive reality. The present is the early dawn of the human day. The true human type is largely undeveloped, and its imperfections are phases of a rudimental condition.

3. The genus is emerging from animalism, from which it is distinct by reason of its intellectual supremacy over material conditions, and the degree of its emergence is measured by the development of this supremacy.

4. This development is promoted by all that promotes selfhood, as self-illumination, self-respect, self-responsibility, self-control, and self-directiveness; and it is hindered by applying to humanism that which fitly applies only to animalism, as the despotic assertiveness of external mastery, humiliation, pain, penalty, fear, and favor.

5. The teaching profession is the trustee of this evolution and should be the high expert commission of the world for framing its moral codes. It should be guided by what it finds directly in the ever-present problem, and be in no degree subject to prejudices, traditions, dogmas, or deceitful interpretations that ignorance has given to human nature. In this sphere its peculiar mission is to originate and set forth the latest, best, and most saving gifts of intelligence to the world.

THE SCHOLAR AND THE STATE

BY R. H. WEBSTER, SUPERINTENDENT OF SCHOOLS, SAN FRANCISCO, CAL.

Allegiance to learning and citizenship impels to this discussion. We need the college to connect the present with the past. There is no such thing as a full and complete existence for the individual, or for the state, if that existence does not join itself to the whole life of humanity. For us ancestry has labored. Solemn and inspiring it is to review the past; to trace the progress and development of that knowledge which we have inherited; to see how, thru passing centuries, the noblest intellects were laboring in the mines of thought, that we might stand upon a vantage-ground and become the heirs of treasures which were the products of their strivings.

Could modern civilization afford to be deprived of a knowledge of the learning and culture of the past? "When ancient opinions and rules of life are taken away, the loss cannot be estimated. From that moment we have no compass to direct us; nor can we know distinctly to what port to steer." Lost are the influences of the illustrious dead, the heroic

deeds that kindle and feed the flame of valor and self-devotion, the quickening and instructive annals of history, the songs of the bards, the teachings of philosophy wrestling with the great questions of truth, and the painful, resolute steps of discoverers leading the ages after them up sunlit heights of science. But the guardianship and transmission of this dowry of the past are in the hands of the world's scholars as trustees for mankind. The halls of liberal culture open backward into galleries of antiquity and onward into the life of the present, giving to the exploring eye, beneath their arches, the long vista of the progress of the race.

We request no undue homage for the wisdom of the elders; but more reverence for the ancients would benefit us in our personal and national development. It is needed to correct that flippant self-sufficiency that tinges with arrogance our confident and often vain American energy, and the smattering of universal knowledge that conceives it has nothing to learn.

We need the college and the college man in alliance with the life of the state, for the security and honor of republican principles. We believe in a government, not of despotic force, nor of kings enthroned by divine right, nor of privileged classes; but in government of equal laws framed by popular will, defining and guarding popular rights, administered by representatives elected by universal suffrage. Despotism can maintain itself only in the unreasoning debasement of its subjects. Ignorance supports iniquitous and oppressive political systems. These are familiar sayings, yet they demand continued and emphatic iteration. Popular education inspired by the college and college-bred man is the one invincible foe of special privilege and political absolutism. It is a liberator freeing thought and inquiry.

Liberal culture does not merely proclaim republican equality, but works out the practical elevation of the lowly. It lets down a ladder to the very lowest grade of social life on which the humblest may climb to the highest. New men are ever rising out of the stern schools of want and hardship to the charge of great enterprises and to tasks of public life. This is the promotion of the only true aristocracy — the peerage of intellect.

It is true that the ambitious demagog is created where the many are stimulated by uncontrolled aspirations and the prizes of advancement. And in opposing this class the greatest service of the scholar is needed to indicate the councils of reason, to thrust and destroy the cunning sophistry set forth, with the sword of experience and logic. The demagog finds no comfort save with those whom he can deceive and beguile. Self-government with us is a government of a nation of readers, thinkers, and debaters.

Patriotism.— Fear is often expressed that the scholar and the college cannot be relied on in the supreme stress of some great crisis to furnish

the military arm to defend the republic against the weapons of war. "We are not enfeebled by philosophy." These words of the great Athenian commander and orator are as true today as when he uttered them. When the clarion has sounded "to arms" in the republic, among all the clear-brained and strong-limbed that rose at the call none have given a more jubilant response or rendered more valiant service than the scholars of our nation, both within and without our peaceful academic shades. No question can now be raised concerning the alliance of letters with loyalty and courage, for our college halls are hung with laurels of valor, the honor of heroes whose blood crimsoned battlefields for union, liberty, and national glory.

Another office of the college in its influence upon the state is to correct the tendency to materialism, against which all communities have to guard. In the daily grind of life, this tendency appears inseparable from our tasks, and it is difficult to wing our minds above material interests or to cultivate ideals. Material interests must be and should be fostered, and the capabilities of a people should be tried to the utmost in furnishing wealth, not only for the bodily comfort of all individuals, but for the adornment of science and art. But it is the function of the college and the scholar to direct the use and enjoyment of this wealth into channels for the exaltation of mankind, to arrest the tendency to employ it for merely sensual gratification leading to vice and decay. Material prosperity should be the handmaid of refinement, the promoter of intellectual ideals. The very presence of an institution of learning suggests other than purely material interests. It declares man's higher needs and more exalted capacities. From the vantage of its dome the outlook is wider over the domain of man's being. Within its walls are the books of knowledge. Art is wooed as a mistress; statues leap forth from marble, and life looks from canvas. Tuneful hands take the lyre, poets sing, and literature is born.

The college is thus the court of the ideal. Under its shadow material life is exalted to the higher nobility of serving truth and right.

In the needs of practical life the scholar must continue to occupy a position of growing importance. The ideal leads the practical; men of thought go before men of action; the scholar is the older partner of the craftsman, furnishing him his tools and supplying his models. All the triumphs of human progress, all the increments of practical growth, are in the inspiration of ideals. The signal triumphs of man over matter during the last fifty years are but the results of the patient toil of the scholar. The expansion of the college curriculum from the traditional classic course to embrace every department of human activity and science has resulted in those splendid achievements of naval architecture, of civil, mechanical, and electrical engineering, that make the closing century the grandest epoch of the world. The noblest practical growth of the state,

its truest wealth, and its fairest honor are not only conditioned upon, but identical with, its highest intellectual advancement.

The duty of the scholar in aiding to maintain the permanent, peaceful, yet progressive order of society is most imperative. The scholar craves a quiet atmosphere. The college demands a settled public tranquillity, and therefore for its own sake favors peace and public composure, that its morning and evening bells may ring clear on the quiet air. It, therefore, asks for restful times, and seeks to insure settled civil order and the steadfastness of the state. And what it asks it helps to give.

When intelligence is diffused, revolutionary thoughts may be started, but they have to be canvassed. In an enlightened community each individual feels competent to ask questions and try issues. Appeals must be to reason, not to passion. All public measures are put on trial by scholars.

The necessity of the college and its product—scholars—has thus far been indicated in our discussion. Attention will now be briefly directed to the duty of the scholar to the state.

Probably there never was an age so crowded with thought, emotion, sentiment, purpose, and utterance as the present; and never an age that called so solemnly for teachers of right thought, noble purpose, and wise and temperate speech.

The patient toil of the student in his laboratory has resulted in signal triumphs of human genius; of splendid achievements in subduing the elements and compelling the powers of nature to work for man. The ocean waves, the mountain streams, even the rays of the sun and the forceful combinations of the elements, are being harnessed to toil for man in perfecting the earth for his occupation.

Rapid transit is erasing state and even international boundaries, and reducing the peoples of the earth to a commonwealth. The struggle for existence, as experienced in material competition, is leveling mankind in social and economic life. The people of America, who have hitherto enjoyed comforts resulting from well-remunerated toil, are feeling the pressure of competition with the underfed millions of Europe and Asia. Discontent is prevalent, and is finding expression in outbreaks against organized government and existing social states. Obligations to the studious have been most gratefully acknowledged. Millions of dollars have been given to the support of the college, and the people have a right to demand that it shall engage in the solution of the grave social problems of the hour.

It has been charged that schoolmen are either indifferent to all movements toward social amelioration or regard them with a cold, critical eye, and consider themselves as mere spectators in the drama of human strife and suffering. It is alleged, and with some cause, that this attitude is due either to lack of instruction in these vital questions or to the manner

in which they are often treated in the class-rooms of our colleges and universities. It does seem, at times, as tho the scholar's path is narrowing as he advances. As the world enlarges, the student should broaden with the rest. He should grow to the size of a statesman, and not shrink to the stature of a critic. Scholarship is weakened unless united with charity and sense. The need of the hour is the correction of political, social, and ethical errors that are being advanced continually, and the active aid of those who are willing and able to attempt and effect it. If a plague is raging, the call is not for one to tell how it could have been prevented, but for help to stamp it out. One fighter on the spot is worth a hundred critics at a distance. It is the great duty of scholars to throw themselves into the midst of social movements with the same energy and persistence with which they pursue intellectual ends. The students of this age have grand opportunities for good. They are possessed of trained mental powers to discern, and the critical judgment to lead. Every scholar should enter politics, not for personal preferment, but for the public weal. His views of men and affairs would be modified, his charities broadened, while the gain to the commonwealth would be substantial and permanent. There are abuses to be corrected; nothing will correct them but intelligent work. It is unfortunate that the schoolman lacks the enthusiasm to place himself foremost in the field of action. Enthusiasm and intelligence are irresistible. The scholar must not allow himself to become a pessimist. He should not only consider what education has done, what educators have accomplished, but be ever mindful of his possibilities. With the power of the educator should be associated the duty of the citizen, a duty that demands a more patient and thoughtful ambition than the unschooled possess — a duty to plow for others to sow; to sow for other hands to reap. Thus will the representatives of our schools and colleges league the state with the ultimate issues of human progress.

GROWTH OF CONFIDENCE BETWEEN HIGH SCHOOLS AND COLLEGES

BY R. B. FULTON, CHANCELLOR OF THE UNIVERSITY OF MISSISSIPPI

It is not the purpose of this paper to discuss theories of co-ordination, or college-entrance requirements, as they are or ought to be. On each of these topics every member of the Departments of Higher and Secondary Education, if not every member of the National Educational Association, is presumed to "hold views," which, of course, depend largely upon his standpoint, his experience, and his personal equation. Your speaker will firmly hold himself back from a theme so prolific of discussion as

co-ordination, even if he finds it necessary to invoke that spirit of altruism which finds its broadest expression in the terse colloquial phrase, "There are others."

Even laymen know how interesting, exciting, and debatable a theme could readily be found in this field. Those really interested in such matters are invited to attend this afternoon's joint session of the Departments of Higher and Secondary Education, in which the elaborate report of the special committee on college-entrance requirements, of which the distinguished Dr. A. F. Nightingale is chairman, will be under consideration, and will present the maturest thought of American educators along these lines.

No American ever studied more enthusiastically, or discussed more earnestly, educational problems and policies than did Thomas Jefferson. Probably more of his untiring energy and vast intellectual power was spent in this direction than in any other. We find him as early as 1779 drawing plans for a system of general education in Virginia. In these his first plans it was proposed that the details of even elementary education thruout the state should be directed by a central power, the faculty of William and Mary College. Only in his later years was he led to the conclusion that no institution, unless controlled entirely by the state, could fully meet its demands for higher education. Even William and Mary College had inherited too much of ecclesiasticism to be the agent of the state.

In his original plans Jefferson proposed to connect the three great branches of education, the primary, the secondary, and the higher.

In this system, by a process of selection of the fittest, the more highly endowed and intelligent children of the people were to have the opportunity for acquiring the highest education the state could afford, and at the public expense. "For more than forty years his mind moved along these three lines of institutional reform for his state: (1) subdivision of counties into hundreds, wards, or townships, based upon militia districts, which should become school districts; (2) grammar schools, classical academies, or local colleges; (3) a state university."

Of these three Mr. Jefferson held that the first and the third, the common schools and the university, were of the highest importance to the state and required the highest legislative care. The second, the classical academies, could be left with greater safety, he thought, to private enterprise and philanthropy.

In 1823 he writes: "Were it necessary to give up either the primaries or the university, I would rather abandon the latter, because it is safer to have a whole people respectably enlightened than a few in a high state of science and the many in ignorance. This last is the most dangerous state in which a nation can be. The nations and governments of Europe are so many proofs of it."

Realizing thus in the first years of this century, as fully as many do at its close, the importance of co-operation in the three parts which make a complete system of education in any commonwealth, and working for the full establishment of such a system in Virginia, as Mr. Jefferson did thruout forty years of his life, he was compelled at the last unwillingly to adapt his theories to actual conditions and to the laws that have ever controlled educational forces. Tho holding the notion that elementary education was more essential to the safety of the state than was university education, he was nevertheless compelled to what seemed a paradoxical course, and yet was the very course which development in education has followed thruout all history. At the last he was led to devote all his energies to the building of that crowning glory of his life and of the state, the University of Virginia. The work and influence of this institution have permeated every hamlet in the state, and thus are hastening the full realization of his wider hopes.

What Jefferson planned to be accomplished by legislative co-ordination, voluntary and hearty co-operation is now largely securing in many states.

This co-operation is having the largest practical test under the well-known system of accrediting schools, as now practiced by a majority of the colleges and universities in the Mississippi valley and westward.

The fact that more than one hundred colleges and universities in the United States have each within the last ten years entered into a formal alliance with from ten to more than one hundred high schools each, represents an educational movement of extent too great to be ephemeral. It is an evolution, and can never lead back to former conditions. If present plans and results are unsatisfactory, out of these something new and something better will be developed.

Naturally the state universities have been foremost among the higher institutions in this movement, and the public high schools make up the large majority of the accredited schools in all the states.

The extent of this co-operation is shown by the fact that the University of Michigan, deservedly honored in having first achieved a plan that yields satisfactory results, has now two hundred upon its list of formally accredited schools. The University of Wisconsin reported last year 137; the University of Indiana, 123; the University of Nebraska, 71; the University of Mississippi, 53; the University of Tennessee, 45; the University of Minnesota, 43; South Carolina College, 36; the University of Alabama, 29; the University of Colorado, 23; the University of South Dakota, 22; Alabama Polytechnic Institute, 22; West Virginia University, 13; the University of Washington, 11; Tulane University, 10; the University of Missouri, 70; the University of Illinois, 135; the University of California, over 67; Lake Forest University, 35; the University of Kansas, 128; the University of Iowa, 146.

Besides the institutions above named, the following have each a well-organized system of co-operation with preparatory schools, most of which are public high schools: University of North Carolina, University of Pennsylvania, University of Vermont, University of Utah, Ohio State University, Cornell University, Washington and Lee University, University of Texas, University of Nashville, and Vanderbilt University.

A quarter of a century ago but few institutions claiming to stand for higher learning, and having any entrance requirements, dared to risk the charge of educational heterodoxy by admitting students without formal examination.

The writer will ever vividly remember his first experience with college-entrance examinations. In one of the years immediately succeeding the Civil War, with other unfortunate novices, he was ushered into the presence of a college professor of mathematics, a graduate of the United States Military Academy, an ex-confederate soldier and general. Mercilessly were plied questions apparently intended to allow the survival of none but the fittest. The group of would-be sophomores were held in suspense as to their fate until the next day, tho everyone was conscious of having been frightened out of his wits, and of having, for this or other more serious cause, given absolutely no proof of mathematical attainments. When again in the presence of the military professor to learn our fate, the procedure took a new and patriotic turn. Those who had served as confederate soldiers were admitted without condition. Those who for any cause had not seen such service were required to enter a lower class, and make up all deficiencies.

Can it be shown that the majority of college-entrance examinations as now held give any better classification of students as to *power* to accomplish the college curriculum than did this arbitrary and patriotic scheme? On the other hand, can the modern system of admission to college on certificate from accredited schools accomplish the desired end by admitting only those who are able to do successfully the college work?

The effort to secure with certainty this result has led to a large diversity of plans for the more confidential or official connection of school and college. State supervision or regulation of high-school work, whether organized as in New York, or Indiana, or Michigan, can do much toward keeping up a fair standard of scholarship in the schools without necessarily drawing colleges and schools closer together in friendly interest. This friendly interest, the very basis of confidence and effective co-operation, can only thrive on mutual acquaintance — an acquaintance that shall thoroly inform the school as to the progress and power needed by the student who aspires to work thru a college course, and shall give the college assurance that the certified freshman has this power.

"Supervision" is a term, more or less acceptable, by which the function of the university in this relationship is frequently designated. It is a

term, however, which does not attract a considerable number of school superintendents who magnify the office of the high school apart from its function in preparing students for college. And yet a certain amount of supervision and work of organization is absolutely necessary, if any efficiency is to be secured.

In the large majority of cases the supervision or directing power of the higher institution is exercised thru the personal visitation of its professors. Ordinarily this has proved to be the simplest, the most direct, and the best method.

Besides the official work of the professor who thus visits a distant high school, there are valuable concomitant benefits belonging to this system. University professors always learn something worth knowing when they wander outside of college walls during term time, and especially when they visit outlying communities as the earnest apostles of higher education. These communities also can, thru their influence, often be helped to a higher appreciation of all thoro educational work.

Recently the employment of special high-school inspectors has been tried with much satisfaction by the Universities of Missouri, of Nebraska, of Illinois, of Minnesota, of Wisconsin, and of Kansas; and this plan is being undertaken in several other states where the large number of schools on the list renders visitation by members of the university faculty almost impracticable. It remains to be proven that this newer plan, not yet fully tested under all conditions, will be altogether as fruitful in cordial good will, clear understanding, and hearty interest as inspection by university professors. There is no substitute for the advantage that comes naturally from personal intercourse between those who represent the school and those who represent the college. Co-ordination may be arranged on paper. Co-operation requires a degree of interest and enthusiasm which only personal contact can fully develop. However perfect the scheme or plan of co-ordination which may be adopted, its perfection is that of a machine. The energy of a motor, and the direction of intelligence, must come in before results that are valuable can be wrought.

While the state universities have been foremost among the higher institutions in encouraging and aiding public and other high schools to properly fit pupils for college work, the state universities have neither sought nor acquired any exclusive claim upon all the students thus prepared. Whatever of educational uplift or advantage may result belongs alike to every college or university that aims at thoro work.

But what is there of real advantage in the system of accrediting high schools and receiving into college classes pupils upon certificate without examination? When a school has been duly inspected, a report made, and a vote taken which places it upon the honored list, has anything more been accomplished for the school than would have resulted if the

college had expressed its good will by adopting complimentary resolutions regarding the school, or by conferring the honorary degree of doctor of laws upon the principal? Have the colleges and universities received benefit proportionate to their efforts to attain higher standards in their work, and to reach larger numbers?

With the purpose of finding correct answers to questions such as these, a few months ago the writer made inquiries, by correspondence, of the presidents of the state and other universities which have had largest experience with the system. Replies received from most of the institutions addressed show, practically with unanimity, that from the college standpoint the following conclusions are well founded:

1. The universities regard co-ordination of some sort with institutions of higher learning as giving valuable prestige to any ambitious high school.

2. Wherever co-ordination has been made in any form, under conditions involving careful inspection and close supervision, hearty mutual confidence and co-operation have surely followed, resulting in better preparation of students for college and an increase in the numbers entering college.

3. The working of the system has proven in many cases to be the very best practical means for spreading the university beyond its own walls—a most profitable kind of "university extension."

Some universities have been quite chary and cautious in bestowing their confidence upon high schools, placing a very considerable burden of proof upon even the most favored schools, and evidently inclining still to the policy of examining all applicants for admission. Other institutions have gone to the opposite extreme in throwing wide open their doors and offering to admit the graduates of any high school that has credit anywhere. It is worthy of note that to the institutions in neither of these groups has come that hearty spirit of co-operation, based upon intelligent appreciation of merit, which alone can produce satisfactory results.

Recently other letters of inquiry have been sent to the accredited high schools in twenty-five states where the system of accrediting is most in vogue. These inquiries were intended to elicit frank criticism by the high-school principals of the methods used to secure co-operation and the results achieved in the various states. Replies have been received from over three hundred principals of high schools in the twenty-five states, most of these representing public high schools. Eighty per cent. of the replies declare distinctly that the system of co-operation in use has led to an increase in the number of pupils entering college from the several schools; that it has a marked effect in stimulating pupils in their high-school work, and that the policy has proven of special advantage to the general cause of education in the community. Eight per cent. of the replies emphatically state that no such favorable results have been

achieved within the experience of the school reporting. Twelve per cent. consider the general outcome to be of doubtful value.

From the states of Indiana, Iowa, Kansas, Nebraska, Michigan, Minnesota, and Wisconsin large numbers of replies have been received, and the writers are practically unanimous in claiming the very best results. It is worthy of remark that these are the states in which co-operation is the most hearty and supervision apparently the most rigid. Many principals urge the importance of more careful supervision, and more rigid exclusion from the lists, of those schools which fail to show satisfactory work.

Prominent criticisms coming from the high schools are to the effect that colleges which maintain preparatory departments lower the standards that are possible in high schools, and that lax supervision and failure by the universities to cut off from the accredited list inefficient schools have the same result. It seems to be generally accepted among the high schools that the maintenance of preparatory departments in colleges is one of the greatest obstacles to the development of hearty co-operation and the growth of efficient high schools. The statistical reports of the Commissioner of Education for 1896–97—the latest available—show that, in 256 colleges and universities reporting, 34 per cent. of the freshmen were prepared by the preparatory departments of colleges, 20 per cent. were prepared by private preparatory schools, and 43 per cent. by public high schools. Because as many as 34 per cent. of all the freshmen reported were prepared in college-preparatory departments, it by no means follows that such departments are necessary, or that higher education needs their continuance. The friction which they naturally engender between colleges and high schools represents a large waste of educational power. If there is present today the president or any professor in any college maintaining in itself a preparatory department, I respectfully urge that he trace the college course of a group of students in the senior preparatory class, and compare results with those achieved by an equal number entering college from other schools, and then decide whether the college-preparatory school really prepares pupils for college.

For many years the authorities of the University of Mississippi seriously regarded a preparatory department as a necessity; and for many years, in spite of friction arising therefrom, such a school was maintained in the belief that it was needed as a feeder for university classes. A few years ago an appeal to the records was made, with results that were startling and that led immediately to the abandonment of preparatory classes. It was found that, out of 182 students who in a certain period were in the sub-freshman or senior preparatory class, not more than one-half became freshmen, and that out of the total number of 182 only four finally graduated from the university, two of these being sons of professors

in the institution. I am confident that careful examination will show equally surprising results in other institutions.

The requirement made of its members by the Southern Association of Colleges and Preparatory Schools, and the other organizations of similar purpose elsewhere in the union, that college work and preparatory work shall be dissociated, goes a long way toward removing a long-established hindrance to hearty co-operation between colleges and the best preparatory and high schools.

There has never been witnessed a more decided nor a more general advance in educational work than that which has been exhibited during the last decade in the earnest efforts made by high schools, colleges, and universities, notably in the South and West, by hearty co-operation, mutual concessions, and mutual confidence, to bridge the gap between secondary and higher schools. Co-ordination has assumed various forms, and will continue to change. But the workers on both sides are surely realizing the hopes, verifying the prophecy, and exemplifying the patriotism of Mr. Jefferson when he wrote these words, near the close of his life, eighty years ago: "A system of general instruction which shall reach every description of our citizens, from the richest to the poorest, as it was the earliest, so will it be the latest of all the public concerns with which I shall permit myself to take an interest. Nor am I tenacious of the form in which it shall be introduced. Be that what it may, our descendants will be as wise as we are, and will know how to amend, and amend it, until it shall suit their circumstances. Give it to us, then, in any shape, and receive for it the inestimable boon, the thanks of the young and the blessings of the old who are past all other service but prayers for the prosperity of our country, and blessings for those who promote it."

THE SPIRIT OF THE CLASSICS

BY MRS. JOSEPHINE HEERMANS, KANSAS CITY, MO.

"The soul of man is widening toward the past,
More largely conscious of the life that was."

Does the summer manifest a trace of springtime? Has the autumn any evidence of bursting buds? Has the thought of the twentieth century any blossom of permanent truth whose root lies buried in Hellenic soil? "Some thoughts always find us young and always leave us so." Is it because they reach across the centuries to the youth of the world — to that past when creative faculties were more productive, when critical sense was less strong than now?

No one would change the present. Its strenuous labor for the right

is sublime. If there is greater unrest in this age, it is because the chrysalis of freedom has given place to the winged state of liberty. And those souls of tender sensibilities who cry out for the beauty and repose of Greece, for the glory of Rome, have but to consider existing institutions to find both in immortal youth.

In this miracle of California it is not difficult to restore Hellas. We have the sea and the mountains, the wheat, the fruit and flowers, the evergreens, the palms, the orange groves, the vine lands, the hum of bees, the changeless skies, the climatic peace. Even mythology is easy here. Great Pan is not dead. The twelve gods of Plato's vision seem to rise — not ghosts, but deities. Mars sits 'neath the olive shade, Athene's gift. Demeter mourns Persephone no more. Phœbus-Apollo drives his gilded car of day. Flowers born of Aphrodite's tears, of Adonis' blood, nod in eternal beauty. Diana's beams project a pathway heavenward, and serene harmony crowns all.

To the extent to which harmony is realized is an individual or a people influential. Harmony is continuity. By spirit is meant the element of continuity as a factor in human progress. Continuity is spirit, if we may define it at all. It is that quality that is most ascending and most enduring. It is without physical embodiment, because it is all substance. It is a paradox fitly illustrated by Vulcan, who was lame because all limbs, and by Cupid, who was blind because all eyes. The spiritual dominion of Greece embraces the round world. Every land, every condition, every medium of expression, is vivified by her intangible force. This dominion is as old as mythology.

Mythology possesses the germ of intellectual products of whatever nature. Each myth has something vital in it, for which reason it became identified with the various thought developments. It gave us epics, dramas, statues, philosophies. No theory can explain all there is in mythology. The thought- and feeling-content is what eludes theories and is what is without beginning of years or end of days.

Thru Homer's song the gods became alive in a nation's belief, and he of poets is still the chief. Thru Socrates' interpretation, muscularity gave way to spirituality, and he of moral philosophers is still the acknowledged leader. The hand of Phidias became the medium thru which a nation's tendency to recognize the divine in humanity was manifested, and he of sculptors is without a rival. Thru and by interpretation all the arts and the sciences were derived from the *Iliad*.

Marx says: "It is much easier for us to find the earthly kernel of the religious nebulosities of the early Greeks than to develop the sublimated form from conditions of everyday life." And that is all we shall try to do — to find the earthly kernel that has fed, with its beauty, or grandeur, or intensity, the thought of all succeeding ages.

We pass from Apollo and his chariot, thru geometry and dynamics, to

astronomy; from Olympian Jove's thunder-bolts, thru electricity and elemental forces, to physics. Mythology gave to Democritus his hypothesis of the indefinite divisibility of matter; it gave to Pythagoras his apprehension of the whole universe as number; it gave to Anaxagoras the conclusion that mind was the really potent force. It gave to the venerable and awful Parmenides the problem of the world in multiplicity; and the battle-ground of modern theological dispute was defined. It gave to Xenophanes a disbelief in the evidence of the senses; and modern ontology is his legacy. In every line of thought, not excepting government and economics, the modern mind is in indissoluble bondage to the service of the Greek spirit.

The spirit of mythology, thru the careers of goddesses, created the matriarchal ideal, which has had its influence in developing republics, the states being a family owing allegiance to the central government, the union of all; the home and central government corresponding. Conference, councils, and arbitration are the fruits of this matriarchal influence. Sparta affords an illustration of this: Lysistrata, during the Peloponnesian war, summoned the women for the purpose of managing the state and putting an end to the devastating war. These things they accomplished. The liberty and importance and social status of Spartan women are a prototype of woman's position today—understand, liberty and social status; not an independence that is absolute. The classical spirit is opposed to that. The influence women have had in forming modern republics is easily demonstrable. This ideal was present "at the sowing of the seed of the world," and it lives on.

In economics Hesiod began the work. His *Works* and *Days* constitute the basis of direct ethical philosophy. His is the first expression of man's introspection, questioning the laws under which he lives and pondering upon his destiny. He saw the wrong and the woe of the unhonored earners of bread, and worked out for them a line of daily conduct submissive to environment. The *Thetes* whom Achilles envied in Elysium were the peasants of Hellas. These people formed an estate too low for Homer to consider, but Hesiod's high morality and love of justice constrained him to plead their cause. 'Tis Hesiod that declares that somewhere in the universe justice is enthroned. This is echoed down the lapse of years by Plato, Empedocles, Lucretius, Virgil, Tasso, Ruskin. It is not only in our own day that justice seems conspicuous by her absence; it was even so then; and the question arose then as now: Shall the oppressed demand redress, or shall they suffer? Shall they endure? Hesiod idealized peace. That was his answer; and he made it permanently attractive because of the contrast its tranquillity offers to the warfare of life. Not in vain shall human justice wait on the divine. The moral poetry of succeeding ages is but the flower of this root. Hesiod surrounded toil with honor. He says: "Before excellence the immortal

gods have placed toil and labor; afar and steep is the road that leads to her, and rough it is at first; but when you reach the height, then truly it is easy, tho so hard before." The spirit of Hesiod took tangible proportions in the guilds of Calvin's time and in the trades unions of our own day. It is no uncommon thing for the membership of a trades union to number 300,000 men. With such strength, the "somewhere" of Hesiod's justice is almost always found. His moral attitude gives place to a legal attitude, over which the spirit of peace still broods. To summarize: The Hesiodic spirit manifests itself in the brotherhoods, the united orders, the trades unions, in all the arguments advanced by labor, in all righteous revolt against the tyranny of injustice. The spirit of intense earnestness, of immense vigor, of splendid effort, that turns despair's mists into a rainbow of hope, that "passes power to the potency o'er it," is Hesiod's.

In economics our questions are the same, comparatively, that the Greeks sought to answer. They dealt with the economical aspects of the body politic, and in explanation had to seek aid of history, philosophy, and psychology. They realized that states contrive to live in spite of bad rulers and bad laws. Custom, that bond between society and state the laws of which we call sociology, which seemed an instinctive growth to them, and still seems so, was really an outgrowth of political philosophy. As "the first wheat sown in the earth was the germ of empires," so the Greek conception of economics is not abolished but preserved thruout the changes necessary for its development to maturity. Let me illustrate: Plato prized agriculture above all other industries. Quesnay, 2,000 years after, considered commerce and agriculture not two co-ordinate sources of wealth, but commerce as only a branch of the tree of agriculture. From the writings of the school to which Quesnay belonged the theory of taxation and that of free trade, and the notion of natural order, natural rights, and natural government, such as Jefferson and Lincoln enunciated, were developed.

We have today no more careful division of skilled labor than was suggested by Plato and Xenophon. Also the early writers clearly held that what a man produces society has helped him to produce, and society therefore has a claim as well as the individual. Emerson reiterates this in a beautiful way when he says that the impulse of a nation directed the hand of Phidias, and the thought of Dante and of Shakespeare. Plato's economics were subordinated to the ethical, and that spirit, by whatever name, permeates the writings on this subject from Mandeville to Mill. What on this subject to Plato was obscure was less so to Aristotle. Aristotle came very near to the notion of capital, and he recognized the function of money. Much of the spirit of Aristotle's ethics had its germ in Solon's ideal of government, realized "when the people obey the rulers, and the rulers obey the laws"— the attainment of which we still indulge the hope.

The Stoics and the Epicureans laid the basis for individualism. This greatly influenced Roman law, and led to a claim for equal rights for all, as typified in the highest phase of modern government. We speak of the highest phase of modern government, but we can find every phase that the past has known. Polybius, speaking of the Athenian constitution, said: "Its highest perfection, owing to its essential instability, was attained in a single career." Has not France in modern times furnished its replica? Of the Spartan constitution he said that "for guarding their country with absolute safety and for preserving their own freedom the legislation of Lycurgus was entirely sufficient, and for those content with these objects there neither exists nor ever has existed a constitution superior to that of Sparta." Is not this the dream of our fathers? And of Rome: "If one is seeking aggrandizement, the constitution of Rome is superior and better constituted for obtaining power." Did he refer to the power of the consuls, the power of the senate, the power of the people, that could all oppose, or could all support, each other; that was a despotism, or an aristocracy, or a democracy, just as it happened? Is that a condition that ceased to exist when Rome fell? Or does the spirit of the Roman constitution in a distinct, definite, and realistic way still walk? One is tempted to think that the Roman spirit is represented in these days by the "man on horseback."

After this brief consideration of government we will turn to the more restful theme of philosophy. If Socrates did not anticipate Bacon's *Inductive Method*, there is certainly a parallel between the spirit and purpose of their methods. Socrates, "from the conceit of knowledge without the reality," and Bacon, from "primary notions," tested men's mental defects. Socrates gave us inductive reasoning and definitions. Plato added analysis and synthesis. Plato's theory of ideas differs very little from Emerson's philosophy, and his doctrine of recollection is voiced again by Wordsworth, in

> Not in entire forgetfulness,
> But trailing clouds of glory do we come.

Plato's *Republic*, where each one loves the perfect, we recognize again in the dreams of later idealists. Blakesley says: "Aristotle's logical works formed the basis of that extraordinary phenomenon, the philosophy of the schoolmen. An empire like this, extending over nearly twenty centuries of time, more or less despotically, but always with great force, is assuredly without a parallel." The spirit of Aristotle's psychology rested upon Hobbes, who also made experience the basis of all knowledge. Hegel admits that the greatest number of philosophical sciences owe to Aristotle their separation and commencement. Our principle of correlation began with him when he mapped out human knowledge in its several provinces, of which each part led on to the next, and all made one

organic whole. Should the spirit of his suggestions actuate the makers of courses of study, what would be the result? About this: (1) persuasive speech — prose; (2) poetry — epic and tragic; (3) ethics; (4) politics; (5) sciences; (6) metaphysics. Suppose we take the prose, poetry, and ethics in our elementary schools, the politics and sciences in our high schools, and the logic and metaphysics in our universities. This would lessen to a very considerable extent the number work, and would change the existing conditions of literature in elementary schools, which is undoubtedly the present tendency.

With Aristotle began our principle of combination. This principle, so prominent in our economics and in our political institutions, is emphasized in matters educational. Each division of the work, from the kindergarten to the university, essential as it is in itself, is but a part of the magnificent whole — the great educational system.

In the science of being, Pyrrho thought he had destroyed all grounds of certitude; and Hume, too, felt the boundaries of inquiry; and Goethe said: "Let us not attempt to demonstrate what cannot be demonstrated." Schopenhauer, full of a Platonic love of intellectuality, yet with selfish cynicism, wailed over the emptiness of existence. His was a Greek soul, but it was the soul of the Cynics. On the other hand, Euclid taught there was one unalterable Being, to be known by reason only — not the One, neither Intelligence merely, but the Good; and everything opposed to it had nothing but a phenomenal existence. And very recent metaphysicians define Good as God, and God as Good, and maintain that Good is natural and primitive and All.

The practice of the Sophists of "making the worse appear the better reason" is repeated every day in the disputations of our legal profession.

From philosophy to science is a step which the classic spirit bridges. Ages ago minds of excessive acuteness existed — minds which distinguished general principles among a multitude of objects enveloping them. This spirit reappears in Newton and Lagrange. Newton's theory of undulatory motion is but a development of an analogy drawn by Diogenes and Vitruvius between the propagation of sound and the spreading of waves on the surface of water when disturbed by a stone.

As in the days of Hipparchus, who prepared his first catalog of new stars because a single new star was observed among those nightly visible, exceptional phenomena are the points from which new explorations of science are made.

The Copernican system was a generalization; astronomers have inferred that, as on earth, so in heaven, or space. Lucretius sang:

> The flame has weight, though highly rare,
> Nor mounts but when compelled by heavier air.

Archimedes, thru experiments proving the buoyancy of bodies in

water, understood clearly that all matter is heavy, leading down by an unbroken succession to Thompson, Stokes, Maxwell, Helmholtz, and others.

Plato generalized; Aristotle generalized; Darwin was the boldest of generalizers. He thought out his theory of the origin of coral reefs before he saw one. His son says: "It was as though he were charged with theorizing power ready to flow into any channel on the slightest disturbance, so that no fact, however small, could avoid realizing a stream of theory, and thus the fact become magnified into importance."

The *aurea mediocritas* was highly esteemed in ancient philosophical and scientific reasoning. It seemed an intuition with them, and they may not have been able to give an analytical reason for using it; but even our profoundest modern mathematicians, Laplace, Lagrange, De Morgan, and Leslie, have hardly exhausted the subject. The existence of error in all measurements is the normal state of things. Disturbing influences must be balanced off against each other; and all one can hope to do is to come near the truth—to apply the method of the mean, in short.

Jevons says: "All scientific processes are grossly approximative. All is hypothetical. We infer of anything what we know of similar objects, and all deductive and inductive reasoning is on this principle. Between generalization and analogy there is a difference of degree only."

Occasionally the classical spirit makes for error, as in the case of Kepler, Comte, and Huggins, regarding their belief in the fatalities of number. But this is not frequent. In all modern science the Aristotelian spirit is like the crystal dropped in a saturated solution: the solidifying particles cling to it by preference, and this thraldom makes for truth.

In government, economics, philosophy, the sciences of today, there are "witnesses, cohorts about us, to left and to right, angels, powers, the unuttered, the unseen"—the spirit of Hellas.

Greece gave us many ideals. The Hesiodic and Platonic have been briefly sketched. I shall as briefly touch upon the Homeric spirit, to which the highest expression of civilization is indebted. What is the highest expression of civilization? Loyalty in men, honor in women, and a literature that glorifies both. Achilles reflects the freedom, both intellectual and spiritual, of the Greek race. Of chivalry and honor he was the type. For three thousand years he has stood the symbol of friendship. All the legends of great friendships that rush to the mind go back for their motive to the *Iliad*, to Achilles and Patroclus. Here we gather the first fruits of equality in friendship, of fervor, courage, passionate faith, sacrifice, constancy. Thru Achilles, the creature of a poet's brain, friendship became an institution among the Greeks. This line of reflection is instinct with suggestion. The modern attitude of detachment, of diplomatic distrust between friends, is not Homeric. What kind of

a man is capable of an Achillean friendship? A man who, like Achilles, is physically, intellectually, and spiritually great. Brutus loved Cæsar, but Brutus was not spiritually great. He was weak-willed. Wolsey loved Henry VIII., but Henry VIII. was not spiritually great. And there are more modern examples. Tennyson emulated this model, perhaps. His monument to friendship, "In Memoriam," involved the labor of sixteen years. It stands almost unique. We shall indulge the hope that the Achillean spirit lives in examples more obscure. Achilles stands for more than the highest type of friendship. Athene in her counsels to him is the god in the man externalized. He stands for the truth that the soul is exterior to man. Beethoven, after long contemplation of the character of Achilles, wrote his "Eroica" symphony. What can we say of an epic portraying the ardent energy of anger and of love so intensively that after three thousand years it impels such expression as this symphony? And of Homeric inspiration Leonardo and Correggio and Lord Leighton gave evidence in their lovely conceptions of Helen. The Helen of Stesichorus, who assailed her; of Æschylus, who judged her; of Euripides, who regarded her as degraded, is not the revered Helen of Homer that lives in story, statue, and painting, of whom Marlowe says:

> Oh, thou art fairer than the evening air
> Clad in the beauty of a thousand stars.

With Goethe this "daughter of the gods, divinely tall and most divinely fair," lives again in allegory; and Tennyson, under the spell of her immortal eyes, gave us, not only "The Dream of Fair Women," but "Ulysses," "The Lotus Eaters," "Oenone," and "Enna." Hers is purely a symbolic figure which has given to every age one argument: the perpetuity of youth, the universality of beauty, the irresistible force of harmony, and the impossibility of displacing these.

Naturally, when we are talking of Helen we are thinking of love—and that was such an inclusive thought with the Greeks, who, loving proportion in everything, gave to each phase of love boundaries which it might not with impunity transcend. Sentimental love had very small space. Such love the Greeks regarded as madness. Sentimental compulsion had little weight with Plato; love had small attraction for Æschylus. In Sophocles' opinion love was like glittering ice held in a child's hands, and Euripides called it a god-sent curse. When Byron sang, "Love has no gift so grateful as his wings," he was voicing a Greek thought. The excessive devotion of Laodameia for her husband was a crime against moderation, and she paid the penalty of death. Perhaps Wordsworth in retelling this story reached his greatest excellence. Intensity always led to fatality. It does yet. The disregard of a positive law of the nation was always avenged. In modern literature this spirit is generally manifest. Browning's "In a Balcony," where Norbert says,

"And what this horror that grows palpable? Some death will run its finger round this spark and sever us," is an instance. The poetry of Arnold, Moore, Hunt, Shelley, Longfellow, Poe, affords similar instances. Outside of literature this spirit of moderation is seen today in the subordination of the emotional nature to the more rational elements of a harmonious life.

The permanence of the Doric spirit is evidenced in modern imitations of Theocritus, Bion, and Moschus, who gave us the idyl. We need not go back to Virgil; we find its embodiment in the nineteenth century. In "Wordsworth's solemn-thoughted idyl, Howitt's ballad-verse, or Tennyson's enchanted revery, or from Browning—some 'Pomegranate,' which, if cut deep down the middle, showed a heart within, blood-tinctured, of a veined humanity!" Shelley, too, reflects it, and in Emerson's "Threnody" we find a close imitation of the lament of Moschus. Mrs. Browning and Jean Ingelow, Coleridge, and our own Lowell and Aldrich mount higher on the poetic ladder by means of the idyl, and in it Tennyson has excelled himself.

It would be impossible within the limits of this paper to speak of the influence of Greek lyrics on modern poetry. How few the poetic creations, epic or lyric, of two thousand years! Dante, Shakespeare, portions of Browning, perhaps. Extracting the thoughts of others, elaborating, quoting, our modern writers are but humming-birds feeding upon the juices of classic blossoms. Would we tell a tale of love? Homer is the master of the human heart; Sappho exhausted love's metaphors ages since. Would we write a hymn of praise to the light that guides? Stesichorus pointed the way. Would we represent the whole of human life, with its web of tragic and comic threads, its lighter graces, its darker hazards? Then we must turn to the drama whose law of righteousness Æschylus pointed out. Self-sacrifice, lost honor, generosity, overwhelming reverses, Sophocles delineated; Euripides, "the human," struck all the chords of tenderness and sorrow; satire, pleasantry, banter, burlesque, humor, wit, were the legacy of Aristophanes. The spirit of this perfect drama "burns on thro' time and ne'er expires." It is still a child of the old eternal soul.

Greece realized her dream of the perfection of reason and taste in her literary creations, original, clear, and high. Plutarch, Lucian, Musæus, Tasso, brought this perfection to us, and with indefinite expansion the Greek influence is being carried by us to future ages.

LET PUPILS BE SO CLASSIFIED AS TO ALLOW UNRESTRICTED PROGRESS OR UNLIMITED TIME, ACCORDING TO ABILITY

[PRACTICAL RESULTS OF EIGHT YEARS' EXPERIENCE WITH THE SEATTLE PLAN]

BY FRANK J. BARNARD, SUPERINTENDENT OF SCHOOLS, SEATTLE, WASH.

A high authority, an expert in military matters, in an elaborate report on the administration of our army in the Philippines, says that the inspector-general's department is a failure; that the engineers' department is composed of untrained and unqualified officers, so inefficient that, had the city been stormed, the loss of life would have been enormous and success doubtful; that our troops suffered greatly in landing; that stores were lost in the surf, including all the ammunition of the Astor battery; and that great injustice is done our soldiers by making them the victims of inexperienced staff officers holding commissions by virtue of political influence.

Of the privates he says: "These troops displayed a spirit of intelligence and obedience, combined with individual willingness to perform their duty, that may be rivaled, but could not be surpassed, ... a body of men of magnificent physique, possessing perfect discipline, and yet without any discipline at all — a military paradox." And also: "Had it not been for the splendid energy of the troops, inspired by a magnificent spirit," the whole army would have been demoralized, our stores and launches would have fallen into the hands of the enemy, and the artillery would have been useless.

Similar reports by other experts were written of the campaigns in Cuba. Such conditions, and the imperative need of trained men in the administration of our affairs at home and in the government of our new possessions, suggest the thought that in the organization of our schools we may find the cause, and perhaps the solution, of these conditions.

As school officers we command great armies, but, except in comparatively few instances, our plans of organization are as obsolete and inefficient as are those so sharply criticised. True reform begins at home. The beauty of the blossom and the quality of the fruit depend upon the proper cultivation of the soil about the roots. The foundation work of a towering building determines the stability of the superstructure.

The future of this great republic is in the hands of the teacher. "As the twig is bent the tree is inclined." The vast majority of the pupils of our grammar schools today will not enter the high school; a greater majority will not enter the college or university; but that minority, the

grammar- and high-school pupils, will shape the destiny of our country, make its laws, govern it, and solve the problems of a new foreign policy.

The drum-beat and march-step of our soldiers in Sunset land have their echo in the music of the piano and march of 15,000,000 pupils in Sunrise land. Think of it: an army of 15,000,000 souls commanded and "licked into shape" by 400,000 officers—the teachers, principals, and superintendents!

How do we organize and manage our army of pupils, its corps, divisions, and brigades, its regiments and companies, its cavalry, infantry, and artillery? Do we keep an accurate record of each private from the time of his first enrollment to the time he is mustered out? As a matter of fact, which we should be brave enough to acknowledge, of every one hundred "twelve-room schools" in this country, in command of a principal and twelve subordinate officers—the teachers—ninety are organized on an absolutely rigid, red-tape basis, in which the individuality of the pupil is lost. If there are four captains—primary teachers—in charge of the new recruits in September, the chances are as ten to one that each will be assigned an equal number, regardless of individual ability or mental alertness. The bright-eyed fellow—a born cavalryman—with ability to gallop ahead, is forced to march with the heavy artillery; while the regular infantry—the average pupil, the backbone of the class—is not only hindered by the presence of the cavalry, but actually halted in its march and made to "mark time" while the heavy Krupp guns are brought into ine with it. What a spectacle a company of soldiers would present, if formed of, first, a few pieces of heavy artillery, then a squad of infantry, then one of cavalry, a few pieces of light artillery, and so on—every branch of the service being represented in the one company, under the command of a single officer!

We are all familiar with the story of Rear-Admiral Sampson's search for the Spanish fleet and his struggles with the heavy, slow-going monitors of our navy, so unwieldy, so unsuited for deep water, that the "New York" and "Iowa" had to tow them, and the speed of the entire fleet was decreased one-half. He states that for lack of speed the monitors could not have come into action at all, had the enemy been met at that time.

So, too, in the organization and direction of our army of pupils, every individual new recruit in September should be assigned to his proper place. He may be a slow-going monitor, never intended to get into deep water, and hence must not be placed among the fast cruisers; for, should he attempt to keep up, he simply goes under and is lost; and, on the other hand, should the cruisers "slow down" to his speed, their usefulness would be lost.

The heavy plow-horse has his work to do, has his place, but it is in the furrow and not on the race-track.

Would any sane man select for his team, or span, a lithe-limbed trotter and a heavy but magnificent Norman draft-horse, and expect to drive them together? Such a team would be absolutely useless. It could neither trot nor haul heavy burdens. But place each with its kind, in its proper class, and both will succeed. And yet we have been classifying pupils on that same plan for fifty years. It is difficult to break away from old traditions. Our politics and religion today are the politics and religion of our ancestors, and the Chinaman still plows with a stick because his great-grandfather did.

The basic idea in the education of our youth is mental activity. Continued mental and physical activity produces mental and moral growth and a long life; the absence or suppression of these activities results in decay. Is it not, then, our bounden duty so to classify our pupils as to promote and foster these activities, not suppress them; to shorten the way for the quick-witted and permit him to enter new fields, and give more time and attention to the slow thinker — restraining neither, but enabling both to make progress, altho advancing at different rates of speed? How can pupils be so classified? Let me illustrate: Suppose there are four separate but parallel railway tracks extending from this city to Boston, with a train on each track ready to start today; some having started yesterday, and others to start tomorrow. The train on track No. 1 is to travel fifty miles an hour; on track No. 2, forty miles an hour; on track No. 3, thirty miles an hour; and on track No. 4, twenty miles an hour; or at such speeds as those in charge find it possible and advisable to maintain. Suppose, furthermore, that eighty of our Boston friends desire to return home. Some, to reach their destination as quickly as possible, take train No. 1; others, to travel less rapidly, take train No. 2 or 3; others, to fill the entire vacation time with profit and pleasure, travel on the slowest train of all — No. 4. Now, is it not evident that train No. 1, leaving today, will soon overtake and pass train No. 4, that left yesterday, and that train No. 1, to leave tomorrow, will soon overtake and pass train No. 4, leaving today? So, too, will train No. 1, leaving today, overtake and pass trains Nos. 2 and 3 that started yesterday. As the trains go thundering along, on the separate tracks, at different rates of speed, all bound for home, many of our friends may change their minds and desire to be transferred to other trains. Some, unable to endure the too rapid travel of train No. 1, transfer to No. 4, as soon as it is overtaken. Those who started on train No. 4 yesterday, sick and discouraged, may have become strong enough to transfer to train No. 1 or No. 2, leaving today, either by stopping off to wait for the one wanted, or by continuing on No. 4 until No. 1 overtakes it, when transfers are quickly made. So the journey continues, all traveling toward Boston, not one taking the back track, but transferring, when advisable, from one train to another, either by overtaking the one next ahead, no

matter on what track it may be, or by waiting for the first one that comes along.

The application of the illustration to the classification of pupils in our schools is plain. The route is the course of study; the mile-posts are the successive chapters of the same, usually designated "first half," "second half" of D, C, B, A primary and D, C, B, A grammar schools. The parallel tracks are the different "divisions" into which the total number of pupils in a class may be grouped, on the basis of twenty pupils in each division, and assigning two divisions to each teacher. It is clear that under such an arrangement two primary teachers can take charge of four parallel tracks, or "Divisions" 1, 2, 3, and 4, allowing each "division" (train) to go ahead at such speed as the ability of the pupils comprising the "division" will permit.

As such a plan was inaugurated in Seattle in 1891, and has been followed uninterruptedly for eight years, will you permit me to quote from the Seattle School Report for 1891–92, p. 64?

The course of study, promotions, and classifications are questions so intimately connected that a discussion of one naturally involves the others.

Schoolmen have, for years, been attempting to answer the questions: "How shall we shorten the course of study?" "How enrich it?" One proposed solution is to abolish almost entirely arithmetic, grammar, and geography, thereby shortening it, and bringing down into the grammar schools such high-school studies as German, French, Latin, geometry, algebra, etc., thus "enriching" the course of study below the high school.

These solutions are obtained by but one rule, viz.: "Save time by the sacrifice of quantity." That is, win the race by throwing overboard part of the cargo. We all admit that for a large number of our boys and girls eight years is too long a time for the work below the high school. Many could do the work in six years, some in less time, while others, naturally slow, although sure thinkers, would require full eight years.

The questions of time and quantity are entirely different factors. Quantity is the course of study itself, while time is the number of years necessary to complete it. If, then, a certain factor, quantity, made up of more or less arithmetic, grammar, geography, spelling, reading, etc., etc., is required for admission to the high school, why not so classify the pupils as to enable them to take the quantity and enter the high school in the shortest possible time? The time of the course of study can thus be shortened for different pupils. Pupils thus enabled to enter the high school in less than eight years take up the enriching studies of German, French, Latin, etc., under the instruction of competent and experienced teachers, but in the high school, not below it. That is to say, the pupils hasten forward toward the "enriching" point, but the "rich" pabulum is not brought down to them.

Such a plan would permit many pupils to complete the entire course of study in the elementary schools, and take two years in the high school by the time they are fourteen years of age. Pupils having once entered the high school would be apt to remain in school, and that department would thereby be greatly strengthened and enlarged.

How can such a plan be put into practical operation? Stated times for promotions will not accomplish it; semi-annual promotions will not solve it.

In my opinion, the only solution is to classify pupils strictly according to abilities and qualifications, and then allow them to master the quantity (the course of study) in such time as they can do the work well.

To illustrate: Suppose there are, in a certain school, eighty pupils in the A primary

grade. I would divide them into four divisions of twenty pupils each, classifying them strictly according to abilities. To one teacher I would give the first and second divisions, to another the third and fourth divisions.

To the teachers and pupils of all the divisions I would say: "Now, the theory upon which the course of study for the fourth year is constructed is that it will take one year to complete it; but if you can do the work thoroughly and easily in less time, why, do so, and then at once begin the work of the fifth year, overtaking the lowest division of that class, if possible." This means daily promotion. Progress is constant. The "first division" of one class will overtake, for a time work with, but finally pass, the lowest division of the next higher class, while the lower divisions will go steadily forward, many of the pupils working up to higher divisions of the same class. In large schools where there are more than two teachers to a grade, the classification can be still more thorough by having a greater number of divisions in each grade.

As the pupils of the Seattle schools have been classified under this plan for eight years, as stated above, we have some practical and interesting results, as shown by our records.

The statistics here given are based upon the records of pupils registered this past year, by grades, and cover a period of time for each grade, reckoned from the date of entry to D primary—or first year to date of last recorded promotion,

The records of 7,090 pupils were studied. Of these 6,576 are pupils below the high school, and of this number 3,271, or about one-half, required additional time to do the work, 792 did the work in the regular time, and 2,513 did the work in less than the time allotted. The total time gained to date, by all the primary and grammar schools, is 1,352 years and three months, reckoning ten months for the school year. The total time lost to date is 2,731 years and three months.

PROMOTION STATISTICS

	Primary schools				Grammar schools				
Items of record	D	C	B	A	D	C	B	A	Totals
Number belonging whose records follow	1,342	1,126	1,105	951	821	582	381	268	6,576
Number of pupils who have gained time since entering D primary	406	335	390	361	302	279	230	210	2,513
Number of pupils who have lost time since entering D primary	656	687	595	508	414	239	122	50	3,271
Number of pupils who have neither gained nor lost time since entering D primary	280	104	120	82	105	64	29	8	792
Total months' time gained by entire grade	788	1,026	1,451	1,915	2,191	2,164	2,280	1,708	13,523
Total months' time lost by entire grade	3,496	4,794	5,330	4,979	4,464	2,900	1,043	307	27,313
BALANCE — Months' time gained by entire grade							1,237	1,401	
BALANCE — Months' time lost by entire grade	2,708	3,768	3,879	3,054	2,273	736			13,790

TABLE SHOWING PER CENT. OF GAIN SINCE ENTERING D PRIMARY
(on basis of ten months' time for each class)

Items of record	Primary schools				Grammar schools				
	D	C	B	A	D	C	B	A	Average
Per cent. of class who gained 5 per cent. or more in time	27	33	28	38	36	40	64	80	35
Per cent. of class who gained 10 per cent. or more in time	25	20	18	20	25	26	38	43	24
Per cent. of class who gained 15 per cent. or more in time	12	15	13	14	17	17	25	34	16
Per cent. of class who gained 20 per cent. or more in time	11	12	10	9	13	10	17	23	12
Per cent. of class who gained 25 per cent. or more in time	6	9	8	7	8	7	13	15	8
Per cent. of class who gained 30 per cent. or more in time	5	7	5	4	4	4	8	7	5
Per cent. of class who gained 40 per cent. or more in time	3	4	3	1	3	2	4	2	3

HIGH SCHOOL

Items of record	First year	Second year	Third year	Fourth year	Totals
Number belonging whose records follow	276	126	82	30	514
Number of pupils who have gained time since entering D primary	125	60	71	10	266
Number of pupils who have lost time since entering D primary	74	26	7	1	108
Number of pupils who have neither gained nor lost time since entering D primary	77	40	4	19	140
Total months' time gained by entire grade	1,626	882	1,073	120	3,701
Total months' time lost by entire grade	699	264	69	10	1,042
BALANCE—Months' time gained by entire grade	927	618	1,004	110	2,659
BALANCE—Months' time lost by entire grade	—	—	—	—	—

TABLE SHOWING PER CENT. OF GAIN SINCE ENTERING D PRIMARY
(on basis of ten months' time for each class)

Items of record	First year	Second year	Third year	Fourth year	Totals
Per cent. of class who gained 5 per cent. or more in time	43	46	69	33	48
Per cent. of class who gained 10 per cent. or more in time	35	39	66	6	39
Per cent. of class who gained 15 per cent. or more in time	15	17	33	6	18
Per cent. of class who gained 20 per cent. or more in time	12	14	15		12
Per cent. of class who gained 25 per cent. or more in time	7	6	10		7
Per cent. of class who gained 30 per cent. or more in time	4	5	6		4
Per cent. of class who gained 40 per cent. or more in time	1	1			1

The results are here given by grades, but, as time is limited, I refer to but one grade to show the practical working of the plan, and as the A grammar or eighth-grade pupils entered the D primary after this system was adopted, their records are of great value.

Eight years, or eighty months, being the theoretical time allotted for the completion of the course required for admission to the high school, that time was taken as a basis for calculations, with these results:

80	per cent.	of the	pupils	gained	4	months	or more	in time
43	"	"	"	"	8	"	"	"
34	"	"	"	"	12	"	"	"
23	"	"	"	"	16	"	"	"
15	"	"	"	"	20	"	"	"
7	"	"	"	"	24	"	"	"
2	"	"	"	"	32	"	"	"

A study of the tables will show approximately the same results for all grades; as, for example, the A primary, of which class 14 per cent. have gained 15 per cent. or more in time, and the first-year high-school class, 12 per cent. of whose members have gained nearly two years in time, having entered the D primary class in 1893.

The advantages of such a system are evident. The slow thinkers are given unlimited time. Those who work — paper carriers and others — can make progress. The quick-witted can forge ahead, and not only be kept mentally active, but be made to save the cost of unnecessary time, which to many parents is a very important item. The slow pupil who, when classed with brighter ones, becomes discouraged and leaves school, if classed with those of equal ability, ranks relatively higher, may become a leader, thrives intellectually, and continues in school to the end. The quick pupil gains time, completes the course, makes room for new pupils, and saves the school district many dollars.

The most gratifying evidence of the value of such a plan is the constant increase in enrollment in the high school, compared with the total in all schools, the percentage of enrollment for 1899 being more than double that of 1891, or, to be exact, an increase in the percentage of 118 per cent. Self-reliance, individuality, thoroness, attention to details, studious habits, respect for law and order, a high per cent. of attendance, and a substantial decrease in per-capita cost are the products of a school system organized and planned to give all a chance to win.

Let me say, in conclusion: Study the capacities of the child. Some are dull, but it is not a crime. As well punish your pupils for being sick as for being dull. You cannot foresee ultimate results. Some minds develop early, others late. Some may appear stupid because they have not been cared for, have not been given their opportunity. With the human mind we must work with nature, not against it; and, if we would do it justice, we must find out its peculiar characteristics, and adapt

ourselves to its individual wants. Do not make the dull boy the bright boy's burden; for then you suppress the mental activities of both. Do not sacrifice the bright pupil to your ambition to have a pupil who will enable you to shine — a sort of reflected glory — but rather grasp him by the hand, wish him success, and push him along. He will keep going, never fear, and in the years to come you will rejoice that you had the courage of your convictions.

Let us not forget the dull, disheartened fellow, but rather give him our sympathy and our best endeavor, cheering, helping, leading, sustaining; for the dunce of the school may turn out in the end the living, progressive, wonder-working genius of the age.

THE OUTLOOK IN EDUCATION

BY NICHOLAS MURRAY BUTLER, COLUMBIA UNIVERSITY, NEW YORK

[STENOGRAPHICALLY REPORTED]

This eventful nineteenth century of ours, now slipping so silently into history, has seemed to grow increasingly self-conscious and introspective. Its literature, its art, and its music are evidence of this tendency. Decade after decade they have tended more and more to analyze emotion, to calculate purpose, to weigh ends; and the century closes with the completest interpenetration of life and of nature by mind that has been known since human history began. Nature has been conquered; its forces are bended in a myriad ways to human will and to human purpose, and increasingly, year after year, that will and that purpose have come to know themselves. All this, so striking to the observer of the movement of thought in our time, is in part a cause and in part an effect of education. As a result, education in all its forms has become the dominant human interest, and the most potent force in shaping our multiplex and many-sided civilization.

Education in its largest sense — that of the school, to be sure, but education thru the printed book, thru the newspaper, thru travel and observation, and thru the mingling of men with men and thru the contact of man with nature — all this has made mankind increasingly self-conscious, and has provided a vastly increased content for his consciousness. When we try to sum up or to estimate this educational movement in all its forms, we are, indeed, dazzled and perplexed. The lines of development cross hither and yon. They draw together and again separate; and we have no machine and no device which can weigh and measure a growth and show a movement so illusive. But we must feel — we cannot help feeling — the vast impressiveness of it all.

Education, which has become universal and so largely free, manifests itself over every foot of the earth's surface occupied by civilized man. Where a cultured nation goes, whether with Kitchener to Khartoum or with Wood to Santiago, there the school and the schoolmaster are the commander's chiefs of staff. They represent the tools with which our modern men most love to work and the instruments upon the result of whose operation they are accustomed to depend with greatest certainty. Every American must recall with pride a splendid instance of this, that American college which sits high on a dark cliff beyond the Sultan's capital, and silently forms character all along back thru the Balkan peninsula, and sheds its light across the thin gray line that separates Europe and Asia, and penetrates the darkness of the Turkish empire — Robert College at Constantinople, with its devoted band of teachers, perhaps the most conspicuous successful instance of an outpost of our American civilization. I cite it as a type of that which has been done and of that which is yet to be done in pushing forward the lines of intelligence, of civil order, of industry, and of learning. The vastness of our newer educational literature, the variety and the multiplicity of our educational institutions, the immense financial outpouring from public tax and from private purse — all this dazzles the imagination and paralyzes the power adequately to understand and to estimate.

But however difficult is an understanding of all this which lies behind us, what shall be said of that which lies in front? If the development of which we are the product is such, what is the message which those who scan the horizon and seek to peer into the future, near or remote, can bring to the men and women of this country?

Men are optimists or pessimists by temperament. They are born with faith or with despair; and while the events of life may modify and shape those temperaments and alter the course and the form of their expression, yet those events are not responsible, I take it, so much as is natural form and bent, for the view which one takes of the movement about him or of the flow of the stream way down toward the far-distant future. But if we study history broadly, sanely, with painstaking and with scholarship, we cannot be pessimists. Mankind, when viewed over any considerable period of time, has been steadily marching up hill. To be sure, the man who is most concerned with some aspect of the moment may have his attention chained by imperfections, weaknesses, and evils, and he may by temperament exalt them until they give him the rule of life.

There is enough, to be sure, in some of the aspects of our contemporary education to discourage and to distress. Many of those aspects have formed the subject of long consideration and careful debate by this body. It is discouraging, for instance, to be told by the friends of public education in France that the state schools are so routine, so wooden, and so much at war with the religious instincts of a large portion of the

population that the children are turning from them in increasing numbers to attend the schools maintained by religious bodies. It is discouraging to be told on high authority that the schools of Prussia are weaning the children of the people in an undue degree, and to what some consider an alarming extent, from agriculture and the mechanic arts. It is still more distressing to be told by those who have read the reports of education in England during the past year that two out of every eleven children have not been in attendance upon any school of any kind at any time; or that every child in attendance upon an elementary school absented himself one day in every five when the schools were in session; or that only 35 per cent. of the elementary-school population is made up of children over ten years of age, and that that proportion is steadily decreasing; or to be told that in some thirty of the largest and richest boroughs of that country the number of enrolled children to each certificated teacher is more than one hundred, and that in the great manufacturing county of Lancashire it is 120, and in the great mining and agricultural county of Durham it is 124.

These are distressing facts. They chain the attention; they challenge criticism. In the mind of the pessimist they invite despair; in the mind of the optimist they are problems demanding instant and courageous solution.

It is distressing to remember some of the events of the year in our own country. We have seen during the past twelve months something little short of an organized political assault upon one portion after another of our educational system. We have seen honored superintendents and teachers driven at the behest of the party organizer and of the spoils-hunter from posts of honor and responsibility which they competently filled. Happily we have seen some of these attacks ignominiously fail thru the force of an aroused and avenging public opinion. But the situation is in many respects one which is not to be met by argumentative attack, or even by public exposure. Those methods are good. Recourse to statutory protection is helpful. But unless the educational forces of this country make it their especial business during the next decade to arouse and instruct public opinion so that it will demand, and keep demanding, and ever demand, the absolute divorce of our public schools, higher and lower, from partisan politics and from private intrigue, then the future of education in this country is not yet secure. In our democracy we have happily a court of last resort and of final appeal in the intelligence and in the conscience of the American people; and I hope the day will never come when any of us will cease to believe that, if only that intelligence and that conscience can be reached directly and without the intervention of the demagog and the time-server, the response will be direct and uplifting. That has never failed, so far as I know, in American history, and, for one, I do not believe that it ever will.

The immediate question, then, that seems to me most to concern the teacher who really cares for education and the children, is this question of making both secure in the protecting strength of intelligent public opinion. At times we underestimate its force. We overestimate its lack of interest. We often fail to get results hoped for, because our own methods are imperfect and our own courage falters. It is within the power of this association to make this question a burning one in every community in the United States, from the far-away Atlantic to this Pacific slope. It is within our power, should we use it rightly and wisely, to rouse the avenging hand of honesty and honor, alike in the largest city and the smallest rural community, where a sin has been committed against childhood. I know of no question now of equal importance before teachers, before the press, and before the public of this country.

The next aggressive, affirmative step must be taken by the teachers themselves. We need — to be perfectly frank — a higher code of professional ethics. There are some proceedings of which no teacher can afford to be the beneficiary, and there are some ambitions which we dare not fulfill by means that are often provided for us. Until the ethics of the teaching profession leads us to refuse to take advantage of political or partisan or purely personal attack upon another, that other will not himself be secure. Where there is a teacher ready to enter in by the door of self-seeking or of corruption, that door will be held wide open. We need not, we may not, make our appeal to others until we have responded to it ourselves.

And that response takes, as I indicated, two closely related forms. First, that high professional sense which holds aloof from the temptation to profit by the disadvantage of another, when that disadvantage has come about for unworthy purposes and by unworthy means. There are some school superintendencies in the United States which ought to be vacant for a period of years, thru the successive declinations of men qualified to fill those positions. The second method is that of applying ourselves directly and persistently to the formation of public opinion about us. Too often these attacks are covered up and kept quiet for fear of injury to our reputations. The time is coming when it will be to the credit of a man or woman to stand up before the public and to say: "I am being driven from my life-work because I will not permit myself to be made the tool of politicians." And there are few communities to which that appeal would be made more than once in vain.

These forms of surreptitious attack upon childhood and upon education always flourish in the dark. The newspaper press, the public forum, open discussion, stamp them out and kill them as the sunlight does the seeds of disease that spring from filth. When we turn the bright light of publicity onto the administration of public education in those cities and towns and rural communities of which just complaint may be made, we

have taken the first needed step toward the education of public opinion to the plane where it demands, and will demand, education solely for education's sake. This means that the profession of teaching must speedily become more professional, more scholarly, with broader preparation, higher ideals, and more insistence upon our professional co-operation and our professional pride.

We, all of us, have to combat in some form or other the conception of public education as philanthropy — one of the most corroding attacks that can be made upon the common school. If a community supposes for one moment that it supports its schools for the education of those who cannot educate themselves at private expense, it has begun by placing its schools on the lowest possible level, and it has been false to a primary tenet of our American democracy. It is a corollary to that conception that the schools exist to provide places for someone; and when that ideal enters, the interest of the child disappears. We teachers are in no small degree to blame for that impression that the schools exist for us. One may admit with both candor and truth that teachers have in a measure been driven to that attitude by attacks from without, but it is easy to carry that plea too far; and when we band ourselves together for any other than high educational purposes, we are ourselves interfering with the purpose of the school and with the development of sound public opinion, on which the efficient democratic school must finally rest. We must come face to face, and at close quarters, with these questions, not only as a body, but as individuals. In their individual, concrete form they are not easy of solution. They present distressing material and personal features. They are often the source, and may be made the cause, of much hardship and suffering. On the other hand there are the children of this nation, helpless so far as school instruction is concerned, save as we help them; and that which we are bartering away, if we do barter it, is not ours, but theirs. No teacher worthy of the name and calling can look that situation or proposition frankly and fully in the face and enter consciously upon a wrong course of action.

One who travels across this continent and questions his fellows as he goes, finds that it is not so much a question of methods of teaching, of course of study, of emphasis upon this ideal or upon that, which is at present attracting attention; but it is this question of the right of the people to have their schools managed for the children without interference, without inefficiency, without corruption; and one cannot listen to that unanimous expression of opinion from shore to shore and be indifferent to the lesson which it conveys.

We cannot reach this public opinion of ours by scholarship alone. Scholarship is helpful. It commands, and deservedly commands, respect. It is the source of one sort of power. But unless we can go before public opinion with that high type of power which life, and only life, can give,

we shall find ourselves making our appeal in vain. The teacher of today needs scholarship, needs efficiency, but, most of all and together with these, he needs power. There have been scholarly men and women by the score, efficient and inefficient, who failed in the attribute of power. What is its source, and where are we, peering into the future, to find power with which to do that work which is intrusted to us, and to reach, affect, and uplift our surrounding public opinion? There is only one source of permanent power, and that is in a life of service and of sacrifice. It is alike the teaching of the Christian religion and of the wisest philosophy of modern times, that he who loseth his life shall find it. Interpreted in terms of our problem this means that thru sacrifice and service comes that strength which is power. One may grasp and accumulate everlastingly for self, may gain scholarship and produce efficiency, and yet lack that element of power which is the most human, the most lasting, and the most influential of the teacher's attributes. Given that power thru service, and almost any load may be lifted. There is no force like it in our education. There is no force like it in our civilization. And whether it be in some village Hampden, or some mute, inglorious Milton, or whether it find expression in more conspicuous and obvious forms, that is the secret of the usefulness which we seek, and of the independence from other than professional trammels and professional standards which we demand and rightly demand.

I am an optimist. The larger movement is upward and onward. It is sweeping, and has swept, before it greater obstacles and imperfections than these of which I speak. That movement will continue to be onward in France, in Prussia, in England. It will continue to be onward here. It cannot be held back. But optimism may be conscious and judicious, or it may be blind and unreasoning. If blind and unreasoning, we contribute thru our indifference and our carelessness to the postponement of the completion of the particular task which lies directly in front of us at the moment. If, on the other hand, our optimism be sane, critical, and courageous, we are arming ourselves to contribute to this forward movement. Therefore I urge those who may at the moment be attracted to the dark side of the picture, as it is presented here and there, by this writer and by that, by this speaker and by that, to remember that, taken in longer periods of decades, of generations, of centuries, these little backward movements in the current seem insignificant. Remember, also, that the next step depends, not upon some irresponsible force or some abstract person, but upon ourselves. There is no more individual and definite responsibility resting upon us teachers than that. It is the peculiar burden of our profession at this time. We may afford to pass over for the moment, or the year, every other question which would otherwise excite our interest, and provoke animated discussion, and divide our opinions and our convictions. But on this one single point, right straight

in front of us, we must be unanimous. The school must be free, and it must be for education, and not for politics or for cliques. Whether it shall be so or whether it shall not, depends upon the effectiveness with which we gain power and reach public opinion.

THE PROGRESS IN PUBLIC EDUCATION

BY F. LOUIS SOLDAN, SUPERINTENDENT OF SCHOOLS, ST. LOUIS, MO.

[STENOGRAPHICALLY REPORTED]

The admiring eyes of the traveler on his way to California from the East see the desert change almost suddenly to a paradise. All this beauty, all this wealth, of palm tree, of flower and fruit, of orchard and vineyard, owe their existence to the creative intelligence of man. He found this region a desert, and he changed it to a garden. He touched the arid sand with the magic wand of intelligent industry, and the springs of water began to flow, and the gray dust of the desert changed to green fields and smiling gardens. In the older countries man found nature ready to receive him, and his environment made man what he grew to be. Here, on the Pacific slope, the opposite is true; man made nature. He shaped her to suit his wants. He made the water flow over the dry land and brought from the ends of the earth the seed and vine that he wished her to bear. Elsewhere his environment made man, here man made his environment.

It is frequently said that education is the adjustment to environment, and that the child must be taught to conform with the demands which life, as he finds it, makes upon him. He must learn to adjust himself to customs, laws, and institutions, and become a citizen; he must learn to adjust himself to the demands of industrial life of the community, and become a worker.

Yet, all these considerations notwithstanding, it would be a mistake to suppose that education is nothing but the adjustment of the child to the life that surrounds him. Adjustment to environment is certainly one of the great tasks of the school; but education means infinitely more. Another task of education is at least as important: that man should learn to adjust in turn his environment to the ideals of his own soul. In fact, man adjusts himself to his surroundings, in order that he may learn to adjust his surroundings to his own spiritual and physical needs. He is the master, not the slave of nature. Without the modifying influence which man exerts on his environment there could be no progressive growth, no development of culture, no external realization of man's ideal world.

The pioneers of this state created a new world out of the desert; similarly the destiny of man makes it the task and duty of education to lead the individual to observe the world, and to learn its lessons in literature, geography, history, and all the lore of the school; and, above all things, to train him for thoughtful action, so that he may learn to give expression, in words and deeds, to the ideal world within him — to the world of aspiration and duty.

The fullness of life for which education is to prepare is not found in training young minds in habits of contemplation, but in training for thoughtful action. Education must build up, not only the impressible brain, but more particularly the impressive will and creative intelligence. The current of life does not flow merely from the world inward, in impressions received and experience gained, but from the soul outward, in words spoken and deeds done. It is the constant task of education to make the real the ideal, and, in turn, to make the ideal real. In other words, education must lead the child to form correct ideas of life within and nature without, and also to cultivate the ability to form purpose and plan, and give to these ideas external reality thru action. The demand that education should train in thoughtful, creative, and spontaneous activity forms a higher demand on education than the acquisition of information. There is no child, no matter how humble, but has a share in the shaping of the destiny of the world.

All progress of education, as far as inner education is concerned, must be in the directions of rational adjustment to environment, in the building up of an ideal world of convictions, and of the stimulation of thoughtful activity. There is, however, a line of external progress, which is of the greatest importance in educational work, namely, progress in the material appliances which make effective educational work possible, a liberal supply of the financial means of sustenance, the unifying and systematizing of educational efforts, and the like.

The progress of public education, as far as external growth is concerned, has been stupendous during the last fifty years. Schoolhouses have been built everywhere and have almost kept pace with the needs of our rapidly increasing population. In the sanitation and comfort of schoolhouses, in matters of lighting and ventilation, a steady progress toward more perfect conditions is noticeable everywhere, altho much remains to be done. The great cities take pride in providing schools which will give the best opportunities for the physical as well as the spiritual welfare of the coming generation.

The investment of national wealth in schoolhouses and property needed for the conduct of education is enormous and is increasing in ratio. Better schoolhouses are being built everywhere; progress has been made in their type. All the cities of the land, east and west, vie with each other in giving to the growing generation — to the child, to the

man that is to be, to the men and women who will form the future of this country—the best external appliances in education. In traveling thru Arizona, New Mexico, and California, wherever town or village greeted the speeding train, there the most prominent building was the country school or high school.

The average number of children assigned to each teacher in our crowded city schools is less today than it was twenty years ago, and the tendency is clearly in the direction of further reduction. This means greater influence of the teacher on the training of character. It means a better chance to individualize the work. The duration of the annual school term is steadily growing in the rural schools, and education is becoming more effective thereby. Salaries of teachers are moving upward, and the profession is thereby made more attractive to men and women of talent.

The work of the teacher is conducted on the basis of a more permanent tenure. Teaching has become a profession. It is no longer an avocation for the great mass of those engaged in it, but a vocation. It is less frequently a stepping-stone for young men, on their road to the ministry, the law, or the medical profession, but their final and highest aim. They shape their college course so as to fit themselves for teaching. No more important progress in this direction can be recorded than the fact that the curricula of the most important colleges take cognizance of the existence of teaching as a profession, by providing carefully arranged courses of educational study, including the psychology of childhood and the philosophy of pedagogics.

In the administrative department of education, too, progress toward a higher plane is visible. Until recently the appointment of teachers, the selection of text-books and apparatus, the determining of courses of study, rested exclusively in the hands of the layman, the school trustee or school-board member. In many cities the professional advice of the superintendent was considered, but often it seemed of no great consequence. Of late the view has been gaining ground in some of our cities that the educational expert, the teacher, should have a deciding voice in these matters, not only by courtesy, but by law. In many of the large cities, such as Cincinnati, Cleveland, New York, St. Louis, and others, new laws give the expert, trained for the profession of education, a voice in the management of school affairs; the superintendent of instruction has a voice in the selection of teachers and of text-books, in the arrangement of the course of study, and in all that appertains to the conduct of instruction. While the details of this experiment will be modified by experience, the principle underlying this legislation marks a progressive movement. It is, that the professional teacher is to be the expert in all educational matters. It involves a new duty for the profession and a new responsibility.

The progress made by the common schools in external appliances is great and inspiring. Yet the progress made in the instrumentalities of instruction by the higher institutions of learning is greater still. A new era in university work has begun. Chicago University, the young giant of the West, has sprung within the last decade from the mind of its founders, fully equipped, like Minerva from the head of Zeus. California's great universities are practically the creations of the last twenty years. All this immense educational growth and development, there and elsewhere, is owing, not to the fostering care of a powerful government, but to the munificence of a few noble-minded American citizens, who evidently believed that the best use that can be made of wealth is to make it serve the noblest cause. They have devoted it to education. There is no parallel to such princely gifts to the people in the whole world's history. Mæcenas' great deeds for culture and letters dwindle into insignificance compared with Leland Stanford's gifts to the great university of this state.

We are so close to a process which is going on, of which the whole world has never seen the like, that we forget that we are in the midst of a world-historic time in education, the founding of great universities destined to last thru ages.

All classes of society in our country are imbued with the importance of education in the building of our nation's future. Noble men and women, prompted by the desire to devote their wealth to some public aim that might be most beneficial to their country and people, have selected for their aim the promotion of higher education. There can be no nobler commemoration of individual human existence than to create a source and center of spiritual light that will purify and quicken the pulsation of our national life now and forever. The endowment of universities, the creation of centers of culture in your midst and thruout the land, belong to the history of the last twenty years.

The various classes and ranks of schools, universities, colleges, high schools, and common schools, have followed of late, with clear-sighted purpose, the idea of mutual adjustment to each other. Schools devoted to higher or elementary education have grown up, as a rule, as independent institutions. The university was founded for one purpose, based on one historic idea; the high school and academy for another, the common school for a third purpose. The thought that education in all its phases should be a unit has given rise to a process of adjustment which marks a most important step in the process of education. The university opens its doors to the citizen by offering courses of popular instruction, or university extension. It invites and enrolls the common-school teacher thru university summer courses, and thru lectures and instruction on the science and art of education; it recognizes thereby the value of the teaching profession as such. The university, once more in its historical

course, influences education in all its phases thruout the land. In turn, preparation for the university has become a leading task in the high school.

This adjustment of the schools to each other denotes the ascendency of the idea that education is a unit, and that all the kinds and classes of educational institutions serve one grand purpose in common.

Our common schools have at all times devoted their best service to the cause of American institutions, and have adjusted their work to the greater interests of our nation. You all remember the inscription of the beautiful coat-of-arms of our nation, *E pluribus unum*, which, translated freely, is: "Out of many, one." It is a fitting motto of the common schools of America. All classes of society, the rich and poor, all religions and denominations, all nationalities, send their children to those schools; and in the short time of a school life — in four or five years — this heterogeneous mass is welded into one common type, and they leave the school as enthusiastic Americans. *E pluribus unum* — out of many the common school makes one; out of many nationalities, out of many tongues, out of many aspirations, the common school creates one grand nation, to which we hope the future shall belong. No more important adjustment to environment can be found than the one made in this direction by the American common school.

Life, to whose demands education is to adjust the youth, is not a fixed fact or steady condition, but is in itself a changing process. Hence, if there were no other reason for the demand of progress in education, the adjustment to an ever-changing environment would necessitate it. In our political life, the changes which the last thirty years have brought, both within and also in the relations of the republic to the world at large, are deep and far-reaching. We have become more of an industrial and commercial people than we were thirty years ago; the products of our workshops and factories are competing in the markets of the world with the great commercial nations. The commercial product means so much raw material with brains and labor added to it, that is to say, intelligent labor. Good taste and honest care, the knowledge of practical purposes, are embodied in every product of industry, and a nation's industrial power is directly enhanced by public education.

Buffon has said that the style that a man writes is his character; as the one is, so, he thinks, is the other. It may be said, with much more truth, that the goods which a nation produces are a direct representation of its character. There are the grace and lightness of France in the merchandise it sends to the markets of the world, and the conservative and reliable character of the English shows itself in the goods it produces. In its commercial products the character of a nation is embodied. It is impossible that the general spread of public education, the progressive excellence of the public schools, should fail to find expression in the

enhancement of our nation's manufacturing ability and the readier access and control of the markets of the world.

We have witnessed the change in social, in commercial life, during the last few years. Unless all indications mislead, the changes just begun in economic conditions will continue, and will become far-reaching and sweeping. Already to American products the markets of the world are open; already the leading business houses of the United States lay plans for taking their stand in the markets of Europe and Asia. The goods produced by the American people will find a place all the world over. If you consider this possibility or probability, you will find that a new task arises for education — the adjustment of the common school and advanced school to these demands. I do not mean that any school could, or should, educate the skilled workman; or debase its educational aim to the lower level of utilitarianism. No public school can undertake to prepare for any specific commercial or business pursuit. You will find that our advantage in the market of the world will be the fact that in the American goods, brains, industry, taste, and honesty have been embodied; those ingredients, added to nature's raw material, make the valuable articles of commerce, and the world is bound to respect and buy them. One hundredth part of the commercial article is produced by nature, and the other 99 per cent. are the result of the education of the masses. The new economic needs of our nation demand an adjustment to life by the cultivation of ready intelligence, the cultivation of good taste, and of thoughtful and spontaneous activity. How, in view of our economic conditions, some can persist in speaking of drawing, for instance, as a fad is incomprehensible. There is no more important study in the whole curriculum of the public schools, if our nation is to become *the* commercial and manufacturing nation of the world.

Our political future will be peaceful; that is both the hope and desire of our nation. The inevitable growing complexity of economic and political conditions will lead to problems of government which the citizen and voter will be called on to decide. One of the most interesting spectacles in the political campaign of a few years ago, when the difficult problem of the currency arose, was the educational feature connected with it. It showed the readiness and eagerness of our people to inform themselves on new and difficult political or economic issues. The newspapers became teachers and text-books of economics. You remember in your own town — in this city — the curbstone school which each curbstone orator assembled. He kept a listening and thoughtful crowd around him, and public judgment was slowly formed. Our public school, and the habits it engenders, have had something to do with the ability of our people to inform themselves thoughtfully on the current issues of the day.

Whenever you, teachers, require from your pupils not simply the

recollection and recitation of the data of information, but insist on the ready and thoughtful assimilation of such knowledge, you are doing a service to education. When you draw out the pupil to think of the subjects you teach, independently, you train future citizens in one of the characteristics which furnish the very foundation of our free institutions, namely, in the ability to reason readily and quickly on given propositions, and to arrive at independent conclusions; these form the sole basis on which strong convictions can grow.

George William Curtis said: "The great argument for popular government is not the essential rights of a majority, but a celestial law which subordinates the brute force of numbers to intellectual and moral ascendants." There is no instrument, no agency in American public life on which our government rests in a higher degree than on the kind of culture which the teacher gives to the rising generation in the schoolroom.

USURPATION OF HOME BY SCHOOL

BY AARON GOVE, SUPERINTENDENT OF SCHOOLS, DENVER, COLO.

The American home is giving way more and more to the encroachments of the public school. The paternalism that is so evident in other lines of social and political economy casts its light and shadow across the threshold of the home. The changes under way in the administration of local and national government, the progress in the arts and practices of common life, demanding modified surroundings, extended conveniences, elaborate decoration, and richly varied cuisine, appear as an influence upon child life as the pupil reaches the age for continued and regular intercourse with teacher and school.

More than ever the chief function of the parental relation is acquisition of material wealth. Little by little that which pertains to the far greater and more important features of life — the training and cultivation of the spiritual and the intellectual — is relegated to the schoolmaster and the schoolhouse. Who shall say whether or not this modern movement toward a radical change in society be a real step toward advanced power and culture with the nation, or the turning-point in history when the severe religious and effective discipline of the early American home shall disappear? Whatever be the opinion, the condition is upon us. Active schoolmasters are compelled to seek for measures competent to the occasion; to consider steps that, taken, shall prevent retrogression.

In the beginning the school was avowedly for religious and intellectual training. No thought of our fathers is apparent that the school had any rights, was to perform any of the duties in the teaching and rearing of the

child, that pertained to the parental ownership. The boy belonged to the father, belonged to him in all that is material and essential, covering all time to his twenty-first birthday. Whatever of income inured to the son, from any source whatever, belonged to and was appropriated by the father, with the thought that it had been legitimately acquired by the rearing and training of the boy.

Soon a more sentimental and, to the present mind, humane method of treatment of the child obtained, until now, frequently at an early age, ownership is exchanged, and the boy or girl often appears as the dictator in important management of the household, and absolute dictator of his own individual desires. This changed condition of home relations accounts in part for a necessity for changed school relations. The school, on its part, has not been slow to accede to and even to ask for increased authority. For a teacher to require, under a rule of the board, and that rule declared valid by the court of justice, that a child not only render a written excuse for absence from school, but in addition to demand the details as to the cause, thereby requiring and compelling a personal knowledge, on the part of the teacher, of private, domestic, and family affairs, would have aroused in our fathers the spirit of rebellion that follows a violation of the rights of free American citizenship. By quiet and persistent encroachment the school is usurping the functions of the home. It must be noticed, however, that the concession seems to be quite readily and somewhat cheerfully made.

The typical home is made up of father, mother, and children. Most fathers of the present have turned themselves away from the supervising of any detailed training for the children. They reserve the right of counsel in a general way, with no intention of inspecting the execution; they are in at the initiative and the conclusion, but not during the process. The notion is prevalent that the bread-winner should be chiefly the bread-winner; that the charms and blessings of connubial life are, when not equal, second to the necessary and important business interests, upon the outcome of which all else seems to depend; for, should the latter fail of accomplishment, all other interests fail or are crippled. The same fondness, pride, and ambition for the children exist now as before; in many instances they have assumed a different form of expression.

To the mother of the household are intrusted the immediate management and direction of the youth. Some of the mothers of the present have chosen to enter the field of direction in governmental affairs and become actors, as they believe, on an advanced stage of woman's life. Whether one agrees that the helpfulness or betterment of society accompanies this change is unimportant here. Mr. Peck and Mrs. Stetson are arguing that issue. The fact remains that women have entered as active participants in the conduct of public affairs. Many of them will continue along that line of activity, and prosecute, with all the intensity, virtue, and

earnestness of the sex, the many enterprises, political and social, with which they are now engaged or upon which they will hereafter enter.

This new life for woman means a necessary relaxation from what has been a part of the accepted traditional duty of the mother. It does not follow that society is not the gainer thereby. Sparta was not alone in asserting that the state was the wisest and best trainer and custodian of the youth of the country. It concerns the purpose of the present paper to suggest the means by which the school shall take up with efficiency and wisdom the tasks and duties of traditional home training, the relinquishment of which appears to be the tendency of present times.

When, at the beginning, home and school were both occupied with the child, six hours a day was assigned to the latter, for a small part of the year; all the rest of the hours belonged to the supervision of the home. Now, with the increased duties assigned to the school, the enlargement of the study field, the increased lines of culture demanded, including art, science, and athletics—even sports and games—amid unprecedented and unlooked-for requirements, covering the large part of the pupil's wakeful day, the time of association with the teacher is often less than six hours. With the recession of the parent must come the accession of the teacher. The pupil, if allowed to drift into trouble or impotence, on account of the transfer from the home of duty and responsibility, must be saved by a corresponding transfer of time. The state has assumed more completely to train the youth, or the home has demanded that the state, at the expense of the public purse, take more intimate and direct control of the youth.

If to any of my readers this position seems to be extreme, I have to reply that, while one will insist that his home is not the kind mentioned, he will recognize others within his knowledge that are. The position of this paper is not that the demand is universal that the state assume this work, but that we have seen this movement grow until, especially in cities and large communities where incidental tasks and duties in the domestic life are impossible of assignment to the boys and girls as in former times, a life of idleness, coupled with neglect by the home, must follow, unless a rigid and regular régime be established and enforced for the individual child. This leads to the necessity of more extended association with the teacher or tutor.

From six hours a day the association must be extended to eight or ten hours, but not necessarily in a schoolhouse or schoolroom. The modern course of study includes outdoor work, field work, and inspection and observation of nature in place. Intellectual tasks, as such, have been lightening too much for a few years past. The average ten-year-old pupil today is not so strong in reasoning power as was his grown-up brother at the same age. Observation, so called, too often superficial and trivial, is now cultivated to an extreme, and the training of reason and memory

and calculation has lapsed. This, however, is but temporary; we shall soon, very soon, swing back to the reasonable course. The tide of softness that has extended to mellowness and ease, the misinterpretation of Herbart, or rather the misapplication of "the doctrine of interest," while unfortunate for a few teachers and more pupils, together with that harmful notion that the pupil should chiefly do that which is agreeable and refrain from the unpleasant, has nearly, if not quite, reached its height. The ebb is near at hand.

I am trying to say that the present disposition to relinquish the home training of children and the enlarged field of elementary instruction demanded require a changed condition in the mechanism of the schools; that so far the amount of effort on the part of the teacher in the training of the child has been much increased, while the time for that work has remained the same. It may be true that six hours a day is quite long enough for formal teaching. The other kind of instruction, not necessarily a rigid adherence to the performance of the assigned task, is quite as important, and means must be forthcoming for attention to that part of the training of youth.

At this time, on the morn of impending revolution, or in process of evolution, in the school system, one dare not venture to name exact methods for the accomplishment of this purpose. The field, as you and I must see it, forces the conclusion that the school, in its formal state, has remained chiefly as our parents instituted it, while every other phase of thought and action in the social, industrial, and political world has changed. No pessimistic idea is involved in this view. It means that, as we have waked up in the important work of methods and are classing philosophy with pedagogy and are improving the manner of approaching the child for training, so we shall be forced to modify the times and occasions of contact with the teacher. It may be that two sets of instructors or tutors are to be furnished daily by the state; one for distinct intellectual drill, with the use of apparatus and text-books, and another for field work, for instruction in the forest, on the playground, in the public garden, and amid collections of animals. It may be that the state will be required to furnish this sort of tutoring at the respective homes of its people. It is certain that, unless the present tendency toward relinquishment by the home of the instruction and training of the child be modified — for which modification a prospect is not within view — the state must assume these duties for self-protection. One cannot assume that such a process would be harmful to the state or to the home. The unpopularity, and perhaps the monstrosity to some people, of the ideas presented compels an arousal of sympathy with a sentiment approaching to horror at the disappearance of home training for boys and girls in our cities. One need not be miserable, however, over the prospect of change, simply because that change involves the leveling of

previously erected beautiful structures or the destruction of cherished traditions.

The state is ready now to connect with each schoolhouse a public lecture-room, free to all the people and convenient for use during the entire waking day, warmed and lighted every evening, as the people may desire. It is also ready to furnish necessary instruction during all these hours. This step will be taken—in truth, it is well under way, as demonstrated by the free "school-board lectures," during the winter, in so many of our cities.

The whole scheme laid out involves an increase in expenditure for public education, consequently an increased tax for the support and maintenance of schools. That will follow as a matter of course when the people are ready, because the genius of our government presumes that a wish of the people, consistent with their ability, will be gratified at demand.

THE ECONOMIC INTERPRETATION OF HISTORY

BY E. A. BRYAN, PRESIDENT OF WASHINGTON STATE AGRICULTURAL COLLEGE, PULLMAN, WASH.

Someone has said that the two chief concerns of mankind have been wealth and religion; that the entire course of human history has been determined by these two elements. If to the term "religion" we give a somewhat liberal interpretation, as including the relations of the human soul to its present environment, as well as to its origin and its ultimate destiny, the epigram would seem to be true. This is but another way of calling attention to the materialistic and the spiritualistic sides of man's nature. All his concerns have to do with his body on the one hand, or with his soul on the other. The reaction of mind upon body and of body upon mind, the impossibility of the separation of the physical and mental activities, or of dealing with these as distinct phenomena, are fundamental facts of human observation, not to say of the teacher's observation. Any consideration of the one set of forces which neglects the other will necessarily lead to untrustworthy results. It is impossible to account for any fact of human history without taking into account both of these elements of human nature. The part that religion has played in human affairs, whether we use the term in its narrower sense as exhibited in sect, in dogma and ceremonials, or in its broader sense as including everything relating to the growth and activities of the soul, be these activities good or be they evil, has been amply set forth in the pages of history. The function of wealth, on the other hand, has been by no means so fully examined into and described by the historian.

There is little need that I should guard the term "wealth" from misapprehension. My excuse for doing so is the popular application of the term only to a vast accumulation of wealth. Wealth is any product of human labor which is capable of ministering to human want. The term is not applicable to natural agencies upon which no labor has been expended to fit them for human use; it is not applicable to those things, however useful, which exist in such abundance as to be equally available to all; but it is applicable to all commodities, however insignificant, which are capable of gratifying human want and of being owned and exchanged. The beggar clothed in rags and eating the food bestowed by charity is nevertheless for the moment possessed of wealth; of insignificant value, but nevertheless wealth. The cottager, with his rude hut, his few square feet of garden, his spade and hoe, is possessed of wealth, just as much so as is the rich man with his mansion and broad domain of land. The quantity of it is not the essential thing about wealth. Indeed, it is the small accumulations of it thruout the world that not only in the aggregate but in its effects upon the race assume transcendent importance. When I speak of wealth, then, do not think of rich men, of glittering palaces and shining equipages and costly apparel; think rather of the vast multitudes of tools and implements in the hands of toiling millions; think of flying spindles and turning wheels; think of ponderous engines and swift ships; think of flocks and herds; think of stores of food, from the scanty cupboard to the elevators almost bursting with their store of golden grain; think of coarse homespun as well as silken robe; think of the tent of the lone Indian as well as of the palaces of the king. All these are wealth. All that man feeds upon by day, wears, lives in, ornaments himself with, employs to gratify his ear, eye, taste; to promote his development or to ruin his body and soul; all of these material surroundings with which he gratifies his insatiable want constitute his wealth. All who live possess and use wealth. The difference is in the quantity of it and in the use of it. All must have it or die. All must have enough of it to afford a material support to the physical and spiritual being sufficient for their effective activities, or the soul will consciously or unconsciously cry out: "Who will deliver me from the body of this death?"

I need not say that the production, exchange, and distribution of this wealth, in order to its consumption, form one of the chief concerns of mankind. The science which accumulates the facts and ascertains the laws of wealth we call economics. And all those facts of individual life or social organization which relate to the production, distribution, exchange, or consumption of wealth we call economic facts. The history of man in relation to these facts we call economic history. I have chosen the title of Thorold Rogers' very useful and interesting book as the subject of my address, not because of any purpose of following his method,

nor because of acquiescence in his conclusions, but because the phrase seems happily to reveal a point of view from which I would for the moment have you look upon human history. There has been no theoretical undervaluation of the importance of history for the instruction of the race. Was it Bacon who said: "History is philosophy teaching by example"? But, as in the guidance of individual action we rely more upon experience than upon reason or philosophy, so the experience of the race, that is, history, becomes the most perfect guide to wise and regulated action—alike individual, national, and racial. But human history is a very broad subject. It involves all of human experience. No one, so far as I am aware, has attempted a treatise upon it, or even sketched in rude outline what such a treatise should include. It presents many aspects: dynastic, political, constitutional, juridical, social, the development of philosophic or religious thought the physiological condition and physical environment of man. The central theme of history is perhaps man's self-realization, and the importance of the respective points of view is measured upon their bearing upon that self-realization. The effect upon him of his material environment, of mind, of political and social institutions, of religion, determines the value of viewing history from that standpoint. Hitherto history has been viewed chiefly from the point of view of dynasties, states, laws. Dynastic history has fastened itself deeply upon the imagination of the historian. And by dynastic history we refer not merely to the successive hereditary lines of chiefs, kings, and emperors—to the Pharaohs, the Cæsars, and the Kaisers—but to that of the men, of whatever title, into whose hands, temporarily or permanently, have fallen the political destinies of a people. Moses, Mohammed, Napoleon, Mirabeau, Cromwell, Washington, Count Cavour, Bismarck, as well as the Stuarts, the Tudors, the Carlovingians, and the Merovingians, belong to dynastic history. A strange fascination in all ages have these men exerted. Whether flung into sudden power by the volcanic forces of society, or ruling mankind by the chance of birth; whether as a subaltern manipulating king, court, and parliament, or as a conqueror snatching the scepter from the nerveless hand of some imbecile monarch; whether king or courtier, warrior, priest, or statesman, a strange fascination, I say, has this one man exercised over society and over the historian. Society has consisted of two classes—the heroes and the hero-worshipers. Historians have incidentally referred to the latter by way of illustration of the careers of the former.

After all, it is perhaps not strange that government should have filled so large a space in the eye of man, and that the history of government should have arranged itself with especial reference to the central figure in it—the monarch. As the broader significance of law and governmental arrangements has become apparent, and these have been observed to be the development of the entire national life, political and constitutional

history have become the subjects of deeper investigation. And such examination of the functions and machinery of government has led to a somewhat broader study of history, which has been termed "the history of civilization," which, while retaining political history as the central feature, has not ignored "social history," nor the history of educational, religious, and philosophic thought. But all of these have been viewed chiefly from their bearing on dynastic or political history, and "history" still, in the main, is the history of rulers and governments.

Human concerns are so many and so varied as to render it impossible to give to all of them due attention, to say nothing of viewing them in just proportion. But at best political arrangements are devices for effecting certain more primary ends. They are by no means themselves the end of society, not to say of life. This function of society has been unduly exalted. Government is to be looked upon as an important tool of society, perhaps the most important. Sometimes it is a very bad instrument, indeed, and sometimes it is better. But history should regard it as instrumental. And even to understand the history of government, economic conditions must be understood. In fact, to secure good economic conditions is perhaps the chief function of government. Hence I have no hesitancy in advancing my principal proposition, namely: "The most important forces in determining human history have been economic." "I do not deny," says Thorold Rogers, "I gladly acknowledge, that the solid study of history has made considerable progress. The narrative is no longer one of war and peace, of royal genealogies, of unrelated dates, of those annals about which the adage was uttered: 'Happy is the nation that has no history.'" It is gratifying to note that within the last decade or two so large a number of writers have devoted themselves to the study of economic history. And, indeed, not only must the results of political and constitutional history be untrustworthy without it, but society would be deprived of an important source of information for its practical guidance.

No one will deny the fundamental importance of wealth to society, nor its powerful reaction upon intellectual or spiritual conditions. The passion for wealth has been the strongest of human passions. I do not refer to the passion for amassing great riches nor to the greed of the miser for gold. I mean that passion which in all ages has driven men to secure a supply for their wants, primarily to provide the means for sustaining life. Take hunger, for example. What can stand in the presence of the rage for food? Before this mighty passion go down all the conventions of society, all regard for law, all rights of property, respect for human life itself; even parental instinct may yield to the frenzy and the fountains of love and hope and faith in the human heart be dried up. It is to the mad greed for wealth that most of the crimes of society may be traced. Fraud, theft, robbery, embezzlement, piracy, murder have their economic side. For the material supply of his wants man will brave any danger,

commit any crime, prostitute the most sacred of human relations. The life of any individual is an image of the life of the community and of the race. In getting a proper perspective for historical values we can do no better thing than study the individual. In the life of your nearest neighbor the chief concerns are economic; namely, how to make a living; how to provide food, clothes, shelter, the necessities and comforts of life on the scale that he has laid before himself. His thought by day, his dream by night, is upon this. It modifies his every relation in life, his self-culture, his governmental opinions, his course as a citizen, his religious activities, his family ties, even his love for his wife. Follow the census-taker in his rounds from the meanest tenement house to the palatial mansion of the merchant prince, and what do you find everywhere occupying the largest place in the affairs of all classes? The making of a living, the creating, or at least the getting, of wealth. So it has always been with the race. We read the wars that were going on with the sword, but history is silent in regard to the fiercer wars that were going on with the plow-share and pruning-hook. With by far the larger part of the race in every age and in every land life has been a struggle to get enough to eat and to wear and to afford shelter. Go into the streets of this fair city tomorrow and read the story in each eager or despondent face. It is an economic story. No one would for a moment think that the material basis of life has been a matter of small concern. It is the more to be wondered at that this, the chief element in the history of every individual, should have been the neglected element in the history of the race. No one would deny that the action and reaction of wealth upon the social, ethical, and political fortunes of the race have been of great importance. But few have recognized their real significance. The determining forces in most political and social phenomena have been economic. The former cannot be understood without a knowledge of the latter. In the words of Dr. Cunningham: "Wars, revolutions, court intrigues, as well as religious movements, have all had an industrial side." The successive stages of human industry have not come by chance. The economy of nature, which always causes a force to follow the line of least resistance, holds good of man. The hunting and fishing stage yielded a competency of wealth for man's simple wants, with little expenditure of labor. It necessarily was the first stage. With the increase of population the area was too narrow to supply a subsistence from the fruits of the chase, and the pastoral stage followed naturally. The same area that supplied a scanty subsistence to the hunter yielded abounding wealth to the shepherd and herdsman. But with the growth of population pastures must fail, for the area in native pasturage that will keep one ox producing 500 pounds of food in three years will when tilled produce twenty tons of wheat in three years. Thus man was driven to agriculture. It was inevitably an extensive agriculture — the rude cultivation of a large area while in its virgin

fertility, and the abandoning of this in a few years for a more distant and more fertile territory. As the land all became settled and the less fertile soil did not yield enough for the population, the period of intensive agriculture ensued, with more thoro tillage, the use of fertilizers, and a mixed husbandry. With this also came a greater division of labor, and the age of manufacture and commerce with its wider industrial organization.

The governmental forms following these successive stages of industry were equally inevitable. The patriarchal family and the tribal organization were necessary accompaniments of the hunting and pastoral stages. From tribal to manorial system, from manorial system to national monarchy, and from this to constitutional government, were the inevitable accompaniments of the economic changes in our racial history. The status of the laborer and the system of productive labor are likewise economic questions. And one may follow the course of history just as surely thru the status of the laborer, as slave, serf, regulated labor, and free contract labor, as he can in the charters of liberty.

How intensely we have conned the pages of history to find the sayings and doings of heroes and demagogs who have helped forward human progress, but how ignorant we are of the history of industries which have made life, happiness, and progress possible! The great basic industry is agriculture. As it has flourished, life, health, comfort, opportunity, hope, have filled the land. As it has failed, despondency, gaunt famine, and despair have stalked abroad. But what do you know — what does the race know — about the development of agriculture? A gentleman from India told me a few days ago of the methods of wheat-raising in India: the same kind of forked stick for a plow, the same primitive methods thruout that were practiced in the days of Abraham. You who wish to devote your intellect and genius to the welfare of the race, have you thought of the possibilities of this method, namely, by improving the means of the food supply thru the progress of the science of agriculture? What do you know of the history of manufacturing industry, of transportation, of domestic and international trade, with all their paraphernalia of moneys, and banks, and systems of credit? Is it that all these things are so simple, or so well known, or that the history of these things has had no lesson for man? Is it that we should solve all the problems of the vast and complex systems of production and commerce on *a priori* principles? Has the past no lessons for us in these things which so nearly concern our daily life and happiness? Modern revolutions are industrial revolutions. Modern wars are commercial wars. Statecraft and diplomacy, legislation and administration, are determined by industrial considerations. Shall the one who undertakes these tasks do so without the preparation which economic history alone can bring? The statesman who follows the deductive system of determining his course by reasoning

from a few accepted dogmas is a very seductive and a very destructive statesman ; but the intimate relation between political and economic conditions is no new thing. The great revolutions, the great migrations, the great discoveries, the great reformations, the great charters of human liberty have their economic interpretation. Magna Charta itself was chiefly an economic document, as the few who have read it well know. The barons who led in the attempt were prompted largely by economic considerations, and the support of the city of London, without which it would have been next to impossible to get it, was based upon purely economic considerations. The fundamental questions of the American revolution were economic. The independence sought was chiefly an economic independence. The determination of the British government to take a part of our wealth without our consent, the navigation laws, the repression of American industry, the burden of supporting foreign troops and foreign office holders, the stamp tax and the tea tax — all were economic questions. The sacred rights invaded were, chiefly and most important of all, rights of property. Our Civil War had at basis an economic question — the slavery question. A vital question in the production of wealth is the cost of labor and the status of the laborer. The dogma, " The government can never exist one-half slave and one-half free," did not depend half so much upon any conflict of abstract principles as upon the economic impossibility of production going on within the same economic unity on principles as directly opposed as that of slave labor and free labor. The question with the slaveholder was the giving up of his wealth and his source of wealth.

The great English Reformation had its economic side. The resistance for generation after generation to the payment of a tax to a foreign potentate — the pope — thus taking money not only out of the people's pockets, but out of the country, was by no means the most insignificant force leading up to that great historical movement. In all the wars of the Protestant revolution industrial questions are so inextricably united with religious ones that any account that neglects the former must necessarily invalidate the conclusions. The migration of the Flemish weavers to England produced almost as profound an effect on the political and religious history of Europe as it did on the industrial. Even the discovery of the New World is to be explained by economic facts. It is well known how important a bearing upon the welfare of all classes of western Europe was the India trade of the twelfth, thirteenth, and fourteenth centuries. The importance of pepper and other spices, not to speak of other commodities, assumed an importance in commerce which no one at the present day would ever suspect. The meats consumed by all classes were cured meats, and for this as well as for other articles of the coarser diet of the day this seasoning was a prime necessity. By means of this a great commerce with India had sprung up, which was carried on over

many caravan routes to the Black and Mediterranean seas, thence thru Genoa and Venice, over the Alps and down the Rhine, enriching the cities along the line, and quickening commerce of every kind thruout Europe. But by the fifteenth century the Turkish conquests had closed all these routes except that by way of Alexandria, and this was threatened. This led to the most zealous efforts to find a sea route to the rich eastern trade, thus avoiding the danger and cost and possible destruction of the overland route. This resulted in the doubling of the Cape of Good Hope by the Portuguese and the discovery of America by Columbus. Not a moment too soon — not soon enough, for Selim the Magnificent overran Egypt, and closed the last route to eastern commerce before the new path had become a commercial one. Cities were ruined, the course of trade diverted, thousands rendered unemployed, and a peasant war was inflicted upon Europe, the Reformation arrested, while the malign influence at work seemed to sweep down from the great unknown.

But I need not multiply illustrations to convince you of my proposition that history cannot be rightly understood unless it is examined from the point of view of the industrial development of the race.

My third and last proposition is that the historical investigation of industrial phenomena opens up a new and useful sphere for history and affords a great opportunity for the betterment of present human conditions. We are now in the midst of a great social ferment. Economic questions are multiplying in number, and the discussion of them is growing in intensity. The money question is being bitterly fought over. The labor question is creating uneasiness in some quarters, and stirring deep passions in others. The method by which corporate power may be made a useful tool of society, on the one hand, and may be prevented from becoming a destructive force, on the other, is being sought for. The problem of pauperism hangs over us like a hideous nightmare. These questions seem now, but they are not, new. Society has for ages been struggling with them. History can throw light upon them. Too many of these problems we have tried to solve upon abstract principles. We have laid down and assumed as true an abstract principle or set of principles, and have followed a purely deductive method in their solution. The conclusions have been generally distrusted, and in too many instances the practical teachings based upon them have proved absurd. Now, history gives us the opportunity of employing the inductive system in dealing with social problems, if we approach it aright. Even if we do not arrive at a set of general propositions universally true, we shall arrive at a sound practical wisdom of the highest consequence. What a flood of light would be thrown on the labor problem by an examination of the history of labor and of labor legislation for the past five or six hundred years! Even the analysis and comparison of the successive systems of industry teach a valuable lesson: our present factory system, where many

operatives are gathered under a single roof, with a minute division of labor; where production is for a world-market whose fluctuations can only be surmised from the faintest indications; where employers and employés are removed in interests, sympathies, and manner of life; where combination is easy and misunderstanding is certain; or its predecessor, the domestic system, where a master workman, in his own house, with his own tools, toiled by the side of his one or two journeymen and two or three apprentices, who labored with the same tools, were clad in the same kind of garments, and produced commodities for customers whom he knew, or who at least were so near that production kept in the rear of consumption; or the still earlier guild system, with its regulations to secure good workmanship and control competition; or the primitive family system, where each little community and nearly each household was economically self-sufficient, even if it was scantily supplied. Or take the progressive status of the laborer as revealed in labor legislation. Take, for example, the Statute of Laborers of 23 Edward III., 1349, after the black death had swept away from one-third to one-half of the laboring population and produced economic changes of the profoundest significance. An inevitable rise in wages and prices followed. This the king and his council undertook to prevent by law. Every laborer was required to accept the wages current during the five or six years prior to the plague, on pain of the direst punishment. Employers were forbidden to pay more, on pain of similar penalties. Any unemployed man was compelled to labor for anyone who might call on him to labor, and he must accept only the wages current before the plague. If any laborer ran away from his employer, he was to be brought back and branded in the forehead with a hot iron with the letter "F," for Falsitie. Or examine the great Statute of Apprentices of 5 Elizabeth, 1563, which remained on the statute books of England until 1841—a period of almost three centuries. Here we have one of the finest opportunities to study the results of the attempt of legislation to determine wages and consequently the prices of food, as well as the attempt to determine the trend of labor. A seven-years' apprenticeship was required in every trade and handicraft; labor was compulsory—if not in some trade or handicraft, then the laborer must serve in husbandry; courts must annually fix wages, and in doing so must have regard to the price of food; the laborer might not leave his employer nor the employer discharge his laborer in less than one year, and then not without three months' notice on either side. The length of daily labor was fixed at twelve hours. Here was a statute made avowedly in the interest of the laborer and of agriculture, and the study of its operations and the social conditions under it for two or three centuries could not but be helpful to one who would equip himself for dealing with the greatest living issues of the day—the labor question. So the study of the rise of the monopolies, of the great trading companies of the

fifteenth and sixteenth centuries, the history of money and instruments of credit, would be wonderfully instructive. How much do you know of the brief but momentous history of our own country? Much, I take it, but not yet enough.

I but weary you to insist upon a view of the subject whose very statement carries conviction. The ministry of wealth is one of the most wonderful facts of history. Its necessity to existence and to happiness, its power of influencing the intelligence and moral growth of mankind, its destructiveness when perverted in use—these have been the themes of moralist, poet, and philosopher. The presence or absence of wealth determines the fate of the race. Intellect shrivels in the presence of want. Energy evaporates. Poverty is the parent of vice and crime. Education, morality, and social gladness thrive under the influence of a competent material support. Great hoards of wealth are even more destructive upon the nobler qualities of man than scanty supplies. They shrivel the heart of the miser; they debauch the prodigal; they drive humility and human love and human sympathy from the heart of the millionaire.

In this constant action of mind upon matter, and reaction of matter upon mind, we have a splendid example of nature's method of securing the progress of the race. I cannot consent to the reasoning of modern socialistic thought. It runs thus: Poverty and misery abound. Vice and crime follow. Wealth is not properly distributed. Some have too much, some not enough. Hence our entire social system is wrong. Surround each with sufficient wealth. Give to each a competency. In this way you take away the chief motive to vice and crime. He that hath will not steal. Give to each enough, and poverty and misery will flee away. Intelligence and virtue will spring up under this benign influence. Give to each a competency of wealth, and you will regenerate the race. The socialistic philosophy is pre-eminently a materialistic philosophy. Given the proper material environment, and you may regenerate mankind. But I reply in brief: Mere wealth has no virtue in itself. In itself it has no power to elevate and strengthen the faculties of man—rather the opposite. Give this human being plenty to eat, and to wear, and to deck himself withal, gratify every want, relieve him from the necessity of enduring soreness of muscle and weariness of brain to secure wealth, and its magic power over him seems to vanish, as the slothful human animals of the tropics and the helpless offspring of the wealthy leisure class abundantly demonstrate. The power of wealth to quicken the activities and develop the physical and intellectual faculties of man, and to contribute to his happiness, comes only when that wealth exists in response to his own energies, only when he has produced it. Marvelous is the reflex influence upon a man of the wealth which he himself has created. But if you merely distribute to him the wealth of

others, feed him with the wealth that other brains and other hands have produced, it is like poison to him. Hence no social scheme is adequate which does not take advantage to the full of the individual ownership of the wealth which he himself has produced and saved.

I have pointed out one method of approach to the most interesting and momentous question of the day. Some think we are on the eve of a great social revolution. We are in the midst of a great social revolution; if not a violent, at least a gradual and peaceful one. That it may continue to be gradual and peaceful should be the desire of every lover of his kind. I believe that only by knowledge, by the discovery of fundamental truth, can social problems be solved. I point to the neglected side of history — economic history — as the source of the greatest body of knowledge, the surest means of practical wisdom for the guidance alike of the statesman, the citizen, and the teacher in their joint task of bettering society and the individual man.

EDUCATIONAL JOURNALISM — ITS TRIBULATIONS AND TRIUMPHS[1]

BY JOHN MACDONALD, PRESIDENT OF THE EDUCATIONAL PRESS ASSOCIATION OF AMERICA, TOPEKA, KAN.

"If one may judge from the average papers presented at our more important educational gatherings, or from the articles contributed by teachers of more or less prominence to the literary periodicals, the most unusual step in the writer's preparation is to consult the literature of the subject, and to weigh carefully the results of experience at home and abroad."

Thus speaks the editor of the *Educational Review* in his May number. The subject of this paper has no literature; hence none could be consulted. The last part of the title of this discourse has been chosen mainly for alliterative purposes. The triumphs of educational journalism are just beginning to appear as a haze on the distant horizon, but unto tribulations we have been born as the sparks fly upward.

For rhetorical purposes and to follow the time-honored custom established by the fathers — peace to their ashes! — our address may be divided into three heads, but it is thought advisable at the outset to state that these heads are to be used solely as points of departure, in which particular also it may be seen that the traditions of the elders are closely followed. A certain distinguished statesman in Kansas once said that the platform of

[1] By request of the author, the amended spellings adopted by the Board of Directors do not appear in this address. [See resolution of Board of Directors adopted at Los Angeles meeting, July 13, 1899.]

a political party was like that of a railway train — a convenient place to get on or off. Thus, too, with texts.

In the first place, inquiries may be made as to the source and nature of the tribulations; in the second place, what triumphs, if any, are now visible to the naked eye; and, in the last place — if the gavel permits — a conclusion of some kind will be reached.

The days in which educational journalism was painfully groping its way through the valley of humiliation, or possibly floundering in the slough of despond, are not so remote that we are likely to forget them. Those were the days when our so-called friends, Eliphaz the Temanite, Bildad the Shuhite, and Zophar the Naamathite, gathered around us, analyzed and dissected us, held up on high our sins and shortcomings, and caused us to curse the day whereon we were born.

If somebody with abundance of leisure and a taste for the curious were to make a list of all the educational periodicals — national, state, and local — which have come and gone during the last thirty-five years, the first part of our text would be fully illustrated and illuminated. Each of them came in to fill a vacuum which in the form of "a long-felt want" had long been depressing the state. A few months, perhaps a year, possibly two or three years of fightings without and fears within, and each passed away in a valedictory to join the innumerable caravan. Like the corals of the Pacific — those hapless zoophytes, which were doubtless worked to death in similes, even as we are killing them now — the periodicals of the past died, leaving fragmentary skeletons as foundations for the journals yet to be.

Breaking away at this point, lest we become lost in the intricacies of figurative speech, it may be suggested, in passing, that these constant struggles to establish educational journals were simply the efforts of a class, that for centuries had been despised and rejected, to make itself heard in its own defense. Let thanks be given to educational papers, first of all, that the schoolmasters of the past — the Holofernes, the Dr. Blimbers, and the Ichabod Cranes — are disappearing from our literature; that for the word *schoolmaster* — with a heavy and sometimes tremendous accent on the *master* — we have substituted *teacher;* that he who in our day instructs youth is both in the world and of it, does not walk with apologetic feet, nor attract to himself the scornful gaze of gods and men because of fantasticalness in dress or gait, or pedantry in speech. In a word or two — for a gavel hangs over this paper like a sword of Damocles — the teacher whom the educational journals have brought to light in these latter days has no apologies to offer for living, moving, and having his being in schoolrooms or elsewhere; walks erect, and in the spirit of the great apostle makes the glorious words, "I magnify mine office," the keynote of his work.

If educational journalism ever reaches the stars, it will be through

difficulties which confront no other class of periodicals. The religious paper soars along on flowery beds of ease. The young woman who subscribes to a religious paper — Presbyterian, for instance — may be expected to persevere unto the end. She may change her name and her abode, but presumably retains her religion, and her support of her church paper remains constant. The young man, too — Baptist, let us say — may with western adaptability deal successively in groceries, hardware, notions, lightning-rods, charts, or petroleum; but his church beliefs have no variableness nor shadow of turning, and his subscription to his religious paper goes on forever. But the typical school-teacher,—today she is with us radiant as a celestial vision; as a flower of the field she flourisheth; tomorrow she is off with young Lochinvar, and the school over which she presided so briefly and so gracefully knows her no more forever — unless, peradventure, in the course of human events she becomes a widow. Her name is changed, or is articulated with another by hyphens; her occupation is gone; her interest in educational journalism abruptly dies; her subscription ends, and the editor, like Rachel weeping for her children, mourns because his subscriber is not. It was Brother George P. Brown who, as he, at the close of a school year, stood gazing wistfully and sadly after these battalions of departing subscribers, in a moment of inspiration conceived the brilliant idea: Go to, let us follow these vanishing hundreds into their homes. And thus it came to pass that the *Public School Journal* became the *School and Home Journal*.

Once upon a time a journal whose columns were devoted mainly to discussions of questions in the third heavens of the profession — infinitely high above the thousands of teachers who toil and struggle and painfully grope their way through the drudgeries of class-work — scornfully referred to other journals which were laboring close to the earth, cheering the faint and preaching good tidings to forlorn and well-nigh shipwrecked teachers, as educational journals of the "mere newspaper variety." And a certain editor whose temperature was suddenly increased by this contemptuous remark felt moved to place one of the "newspaper variety" over against the other for purposes of contrast and comparison. In the journal edited by our critical brother there were three articles — one on the teaching of Latin, a second on secondary schools, a third on German universities. Only these and nothing more. In the journal alleged to be of the "newspaper variety" there were many helpful suggestions how to teach reading, spelling, arithmetic, history, geography, language, manual training; how to study birds, flowers, and plants; and, more important than all these, teachers, out of the depths and riches of their long experience, told in the columns of this paper their younger brothers and sisters how the heart of that bad boy might be reached, and what tactful ways and means could be devised to infuse more wisdom and righteousness into discipline. Besides these, there may have been a column or two or three of news, a

report or two of educational meetings. Curious ideas prevail among some of the brethren in regard to reports of the "newspaper variety." It seems to be thought that divine truth can be set forth in journals only in large print, under some ponderous heading. Is it necessary to say to this intelligent audience — every audience is intelligent when one is addressing it — that in the educational editor's report of the address of some divinely gifted man or woman, some brother or sister, ready to perish for lack of knowledge and guidance, may find a single truth which shall remain in the heart forever as a fountain of living water, springing up unto all good purposes and deeds? Which of these editors — each of them typical of a class — think ye went down to his house justified rather than the other? He who brought cheer and hope, guidance and help to the ninety-and-nine, or he who concentrated all his energies and talents upon the building up of the *one* who safely lay in the sheltered folds of some college or university? To prevent misunderstandings it should be said that the critical journal referred to is published west of the Alleghanies.

But there should be no jealousies nor small rivalries existing between educational journals. The days when simple-minded editors, with a zeal, not according to knowledge, tried to discuss in every issue every department which lies between the gutter and the university are passing away, and the editor who still tries to act all these parts will some day find himself, like Bottom the weaver, "translated." For there are diversities of gifts and diversities of operations. As one star differeth from another in glory, so doth one educational journal differ from others in its sphere of influence. To some it is given to set forth the prosaic things, the drudgeries of the profession; the mission of others seems to be to "let observation with extensive view survey mankind, from China to Peru;" while a select few, like Milton's lost spirits, sit on a hill retired in thoughts more elevate, and reason high of nature's methods, the "sensed-total," and adolescence. For neither in educational journalism nor in aught else can, as the Scripture hath it, "the eye say unto the head, I have no need of thee, nor again the head to the feet, I have no need of you. Nay, much more those members of the body which seem to be more feeble are necessary." Between which scriptural lines brethren who imagine they dwell on mounts of transfiguration may find a whole system of philosophy.

So, too, educational editors have been censured for giving time to a discussion of the business side of their work. Huxley somewhere said something like this: "In order to do good work in this world, one must be a good animal." Which is to say that he must eat well, sleep well, keep his nervous machinery and digestive apparatus in harmony with the solar system. And the educational editor who is to do any work worthy of the name must have a rich base of supplies in the form of advertisements and subscriptions.

Certain of the brethren deplore the fact that the Educational Press Association spends so much time in discussing these prosaic things; but as time in its inexorable way is passing, it may merely be suggested here, as we fly to the next paragraph, that even the great apostle, after finishing his sublime discourse on victory over death and a glorious immortality, immediately added: "Now concerning the collection for the saints. Therefore . . . ."

It is comparatively modern history, too, that an important eastern magazine once upon a time, or twice upon several times, turned its intellectual searchlights on educational journalism, and pronounced it "flat, stale, and unprofitable," and recommended that the editors be placed at the foot of the calendar, subject to amendment and debate. And some of us, after absorbing into our several systems the indiscriminating unjustness of the criticism, could not refrain from expressing our emotions in the sarcastic language of Job: "No doubt but ye are the people, and wisdom shall die with *you*."

Dwelling in this miscellaneous way on the tribulations that so easily beset educational journalism, even the wayfaring man can see that the second part of the text — the triumphs — has been pushed far toward the dead line or time limit which the management of this body has in the plenitude of its wisdom established. It is unquestionably among the triumphs that the representative journals of the United States are today associated in fraternal bonds; and that for the first time in the history of education the management of this National Educational Association has placed the names of five of these educational editors on its program, and has virtually said to each, "Thou art permitted to speak for thyself," which same we are doing with such ability and grace as hath been given us from on high. It is among the triumphs, too, that journals which were ten, fifteen, or twenty years ago living from month to month at a poor dying rate, their editorials a continuous pathetic wail for support and sustenance, have now become an important and an essential part of school systems.

In the West (could one know where the West is; I thought I lived in the West, but after traveling several days westwardly, it seems I must have come from the East), but let us say in the Mississippi valley, there is a saying among newspaper men that a paper never prospers until after it has been sued a time or two for libel. Assuming this to be true, there are bright days ahead for educational journals. Recently, as you all know, one of our number was placed on the defense for alleged libel. The indictment hath gone where the woodbine twineth, but there remains to enrich our educational literature that sonorous phrase, "a fine old educational mastodon" — a phrase which long after we have passed from this terrestrial ball will be used with deadly effect by editors yet unborn. And surely it is an indication of better days to come that Brother

W. A. Bell, of the *Indiana School Journal* — may his Hoosier shadow never grow less! — is able after thirty years of service to retire under the shade of his own vine and fig tree — or, more probably, sugar-maple and hickory — to meditate leisurely and comfortably over his past life.

It is clearly a triumph that the educational journal in its chosen field has become a controlling and persistent force in pushing forward needed school legislation and in retarding the opposite; in blocking the schemes of the demagogues — or, as Brother Brown in a moment of perspiration called them, "demigrogs" — those pestiferous creatures who imagine that the path to political glory lies in devising small things for schools and universities. A triumph it is, too, that the educational editor promotes among the teachers within the reach of his pen or pencil what our French brethren, the great phrase-makers of the universe, call *esprit de corps* — that spirit of pride and enthusiasm in one's profession which makes all things possible. Which reminds me that some years ago, in a certain circular received from a certain, or, more truly speaking, uncertain, superintendent, there was the sepulchral statement that "we have the finest *corpse* of teachers in the state." The superintendent might possibly attribute the melancholy condition of the teaching force to the printer, but there was evidence enough that the statement was solemnly correct.

And were it not for the modesty and humility which are the towering characteristics of all educational and other journals, it might truthfully be said here and now that the phenomenal growth of this National Educational Association from its small beginnings to what we now see is due, largely and mainly, to the efforts and urgings and persistent proclaimings of educational editors.

But the greatest glory and triumph of educational journalism is in the fact that it comes periodically with its evangel of encouragement and hope and strength to the teacher ready to perish among the solitudes. No principal across the hall to send *her* reinforcements in case of mutinies, or to give her counsel in hours of doubt. She must see, decide, act, and conquer for herself. To the tens of thousands of teachers who, at the heads of creeks on lonely prairies, in the obscurities of backwoods, or in the remote recesses of mountains, are daily grappling with the powers and principalities of perverseness and obtuseness in school, or asking what they must do to be saved from the contradiction of sinners in the shape of boards, the monthly journal is library, department of pedagogy, and school of methods, and, infinitely better than all these, a sympathetic friend.

Doubtless, though, those of you who are still awake are by this time fervently praying to be delivered from the educational editor with his tribulations and triumphs. Be of good cheer; the hour of your deliverance is at hand.

But, before the speaker who is now afflicting you terminates this

singular discourse, and abruptly takes his form from off the floor, he feels impelled to express his belief that, in spite of sins of omission and commission, in spite of occasional shallowness and crudeness, the words of George Herbert, the quaint singer of other days, are still and ever true of educational journalism in its leadership of teachers and people to the crowning slopes of achievement: "Thy torch doth show the way."

THE FUNCTION OF THE EDUCATIONAL PRESS

BY GEORGE P. BROWN, EDITOR "SCHOOL AND HOME EDUCATION," BLOOMINGTON, ILL.

Christendom has been for some years slowly but consciously entering upon a new stage in human thought and life. Centuries have been spent in unconscious preparation for it. The seed of this new order was Darwin's discovery that the process of creation is the process of evolution thru the principle of self-activity. This discovery is ushering in a new epoch in human affairs.

It takes a long time to get an idea into the heads of the race, and still longer for it to become active in the hearts and lives of men. Copernicus was the beginning of a new epoch in the thought of mankind. The church, the state, and every other human institution was compelled by his discovery to readjust itself to the new truth which was seen to be more fundamental and commanding than anything previously known in physical science.

The established thought denied and resisted; but the sweet reasonableness of the larger truth prevailed, and a new view of the world and of life has been gradually supplanting the old.

Each new epoch, I take it, begins with the utterance of some new truth more fundamental than any yet known. It works a revolution in systems of thought and practice; for every idea entertained by man must find its place in the system of which the new truth is the fundamental principle. The more fundamental the principle, the more complete and far-reaching is the revolution.

The law of evolution discovered by Darwin is more fundamental than was the law of the planetary system discovered by Copernicus. It works a radical change of view from that which has been established for generations. In no institution will it work, or is it working, greater changes than in education.

I am asked to consider with you, but only for a moment, and while you are taking breath between what has preceded and what is to follow, what is the function of an educational press in this transition period

to a new view of the origin and history of man's physical and spiritual nature.

Horace Greeley used to say that the public press ought to give the people what they wish to read, and as much of what they ought to read as they will endure without stopping the paper. This sounds like a good rule, but it leaves the difficult questions, what the educational public wish to read, and what they ought to read, unanswered.

The student of these problems soon discovers that the number who are consciously hungering and thirsting after distinctively educational reading of any kind is not "so wide as a barn door nor so deep as a well."

Some have a relish for news, especially for that kind called personals, and particularly for those in which mention is made of the reader. They always begin to read the last journal at the *minor mentions*, and the editor is in luck if they do not stop there. What editor has not provided some editorial or communication with special care, and with a certain class of readers in his eye, only to learn later that none of them have ever read it? One of our most prominent school superintendents cut the wrapper of his school journal in the presence of the editor, spent five minutes in running thru the news items, and laid it aside with the consoling remark: "That is the way I read school journals." Now, the editor expected that he would find several good things in that number that he would like to read, and a firm conviction burdened his soul that there were some other things he ought to read.

Next to news the average journal reader, whether superintendent or grade teacher, is interested in a new process of arriving at an old result. He likes the mechanics of his business. A cute way of solving a problem, or a new device for attracting spontaneous and involuntary attention, fills him with temporary delight. The question of the educational value of the process, or of the result, never arises. He is impatient with the ever-recurring demand for the reason of things. "Let it be taken for granted that the reasons are good." The all-important question is how to arrive at required results by a new route. The old path is worn smooth, and the flowers that bloomed beside it have all been plucked. He may be fascinated by a "Johnny story" by which to teach the "fish-bone" sounds used in pronouncing words. The danger of arrested development he knows nothing of. Whether, in learning to read, the child's mind is more interested in fish-bone sounds than in images of ideal living he does not stop to consider.

His school journal may lay bare these dangers, and show the educational value as well as defects of his mechanical device in ways the editor thinks this particular patron ought to read, and he hopes will want to read, only to learn that what has been offered as a help is rejected as a hindrance. The reader declines to continue his subscription to a paper that it makes him angry to read; and no one can blame him for that.

Again the educational editor rubs his eyes and re-examines the situation to discover, if possible, what the few who will read at all *wish* to read and *ought* to read.

He may find incidentally, while seeking to follow Horace Greeley's advice, that there is a growing and already encouragingly large class of the educational public who are pursuing the study of education in the spirit of scientific investigation.

They are hospitable to new ideas and rejoice when a new truth crowds out an old error from their practice. It is this class of teachers and students that is the hope of the country.

The common school is proclaimed as the hope of the country, but this hope is to be realized only when the spirit of these few has become the spirit of all, and the goal of a more abundant life has been substituted for that which the general public calls schooling.

An intelligent representative of this public in my own state declares that schooling is one thing and education is another and different thing, and he proposes to mend matters by six months' *schooling* each year, and six months' *education* in learning the theory and art of living by pursuing some useful vocation. The school is regarded by him as the place for mastering the symbols and scholastic forms of civilized life. His ideal schoolmaster is he who discovers some short-cut, or "improved method," of mastering these forms. His motto, if he should formulate one, would be: "First fill the mind with forms in the school, and then fill these forms with ideas outside."

His ideal school journal would resemble a journal of mechanics. It would describe new devices and processes; educational machines for fixing forms in the memory.

My opinion is that he is wrong, and that this has ceased to be the function of educational journalism, as it has ceased to be the true function of the school. The study of educational values is of recent origin, and has come in with the recent demand for a re-examination of the purpose of the school and a new definition of education.

A new education has dawned because a new view of the world, and a new history of the origin, development, and purpose of man, have been revealed in the docrine of evolution. It may disturb some of the numerous claimants to the authorship of the new education for one to declare that Charles Darwin first promulgated it in his *Origin of Species* and his *Descent of Man*. But we have gotten far enough along in the readjustment of our system of thought to the fundamental law by him revealed to settle this important question finally as to the real authorship of the new education.

When we comprehend the fact that the entire animate and inanimate world is built up of the stepping-stones of our dead selves by which we have achieved the power to consider questions of this sort, and others on

the program of this convention, the problem of education takes a new form, and methods of solution are suggested that make good their claim to newness, thru the new relations in which they are seen. The conditions of the problem are changed.

It is not thru contemplation, but thru action, not by reflection, but by deeds, that man has risen and must ever rise.

Man's chief glory is not, as the philosopher used to declare, to know absolute and eternal and universal truth; the use of his intellect for practical affairs being, therefore, subordinate matters. Theoretic life is not, alone nor chiefly, the soul's genuine concern. Popular belief and the doctrine of evolution both concur in the view that his chief glory is that he is a willing, active being who makes his reason a real, substantial, concrete thing in the world. Evolution establishes the truth of the popular belief, and leaves the ancient philosopher stranded because it displaces his fundamental principle by one still more fundamental.

Man's intellect, instead of being his "crowning glory," came as a more effective instrument for *better doing*. The best doer was the fittest to survive, even while his evolution was purely physical. When in the process of the ages evolution changed to the psychical basis, then the intellect in the form of cunning became the most powerful director of the will, and came eventually to look upon itself as the crowning glory of man. But the ideal man in every age has been and ever will be, in the popular belief, the man of deeds. Not rest, but action; not thought, contemplation, reflection, but effort, execution, will. We will not change our terms *reason* and *rational*, but we will put a new meaning into them. Reason is good will, and good will is the only perfectly good thing in the world. Conduct, behavior, is more than three-fourths of life. It is all of life that is worth living. Whatever of contemplation there is that does not in some way modify or emphasize the deed is mere waste. To know the truth is nothing if it does not mean the doing of the truth. Attainments that do not realize themselves in the life are without value. Knowledge that rests in contemplation, feeling that never rises to deed, is, according to the gospel of evolution, less than sounding brass and tinkling cymbal.

In deciding the function of the educational press from this point of view, we can give but little consideration to the seeker after news of where his friend is located this year, and what salary he is receiving; nor to the manufacturer of new and strange devices for doing what, perhaps, ought not to be done at all. These need not be entirely disregarded, but a small amount of this ingredient will go a long way. Its quantity certainly ought not to be regulated on the principle on which Bridget used her eggs. The story goes that Bridget had received careful instructions about the ingredients of her cake, in the construction of which two eggs were to be used. The cake appeared in due time, and its peculiarities led to a cross-examination of the cook.

"How many eggs did you use, Bridget?"

"You said I was to use two, mum; but they were not very good, and I thought it would be safer to use five, mum."

The study of psychology in the light of this principle of evolution has revealed many things to us that were concealed from the wise and prudent of a former generation who had not this key. Education must be readjusted to a new psychology, as well as to a new history of man's origin and growth. Time will not permit me to enumerate the changes of view in almost every department of life that this new principle demands.

The educational press must be the standard-bearer rather than the camp-follower of the educational host, if it shall perform its function. It must gather and circulate the material by which public opinion shall be molded, and serve as the herald, at least, of the leaders of the educational army. It seeks to publish the observations, experiences, and tentative conclusions of men and women who write with varying degrees of consciousness of the transition in educational philosophy and practice that we are now entering upon. The less conscious one is of the philosophy of the movement, the more valuable, sometimes, is his contribution, provided he is sensitive to the new atmosphere. Those who are not influenced by it may be good priests and scribes for recording what is done under the law, but they are not prophets of the coming time.

I have said that we are at the beginning of a new readjustment of our intellectual view of the world to a new fundamental idea, called evolution. It reaches down nearer to the core of things and must influence man's life more profoundly than did the discovery of Copernicus. It was inevitable that it should produce a fermentation in the educational world as well as in the world of physical science. Psychology was among the first of the metaphysical sciences to feel its influence, and, as a consequence, pedagogy began to reach out its tentacles in every direction in a blind sort of way for a practice that should be an adequate form for the new thought.

Educational journalism, as has already been suggested, if it is to be of any considerable service, must be active in diffusing among its readers the best thought and practice of the best minds of the nation. It must extract from the great mass of tentative views and opinions what seems to be of permanent value, and give it out in brief, condensed paragraphs to its busy readers. The journal has a mission different from the book. The book gives a complete exposition of either the doctrine or the method of the writer, who is a single individual. The periodical informs its readers of what many intelligent people are thinking and doing in their efforts to find answers to the questions all are asking.

Of course, the educational press must see and state the problems, and be quick to discover the trend of general educational thought from the

multiplicity and variety of the thoughts of individuals. Hence the need, greater than any other, that a larger number of those recognized as leaders in the readjustment of education to changing conditions shall connect themselves with it by making free use of its columns to record their observations and reflections. They must do this in an altruistic spirit and without expectation of pecuniary reward. The educational public must join hands with the educational editor in helping him in his missionary work of diffusing knowledge among the people. The man or woman who is not willing to do this for the cause, at least until the general public has awakened to the consciousness that they have souls as well as pockets, cannot, as a rule, write anything that will be of much service to the cause. It is the spirit in which things are uttered, as well as that which they contain, that makes their publication of value.

The short time of fifteen minutes gives little opportunity for more than a few disjointed suggestions of what should be considered by this assembly as the function of the educational press. For some years the magazines addressed to the general public have been discharging some of its functions. The time may not be so far distant as we think when what the teacher wishes to read, and ought to read, will be the things which the general public will wish to read. There is little in education that is not of vital interest to the home. When the school shall realize its full function for the children, and they shall have become active citizens, they will be both able and willing to read what now they cannot read for the reason that their schooling has done so little to assist in their education.

The reason why so few are really interested in the study of education, or of religion, or of art, or of politics, is that their powers have not been trained to think these subjects. They learn to think business by the persistent study and practice of it. There is no other way for them to become interested in what makes for the higher life of the soul.

It is the doctrine of this paper that the educational press must seek to diffuse the kind of ideas among the educational public that will tend to the creating of a rational theory and practice of educating children in the schools and the homes. It must seek to unite the school and the home in this study. It must reorganize the ideas and forces at work in the world for the higher evolution of the race, and direct attention to them. It must seek to improve the thinking of teachers and parents as persistently as it seeks to improve their practices. Education is an art that can never be mastered unless the principles of the art and its purpose are well understood.

The educational press ought to learn, from the history of the past, that all education must have behavior, conduct, deeds, as the direct aim of its endeavor. The speaker has been declaring for some years that these things should be the aim of the endeavors of this National Educational Association as a body, and that it ought to set itself persistently

to work to make its ideals prevail among the people. Contemplation and erudition are good things. Deeds are the best thing. They are the fruition of all educational doctrine and effort.

ARE EDUCATIONAL JOURNALS EDUCATIONAL?

BY WILLIAM GEORGE BRUCE, EDITOR OF THE "AMERICAN SCHOOL BOARD JOURNAL," MILWAUKEE, WIS.

A leading educator recently made the public statement that he would rather be crucified than read half the educational journals which come—no doubt gratuitously—to his desk each month. No class of men engaged in a profession have more printed matter flung at them than the schoolmaster. Were he to attempt to read all the educational journals, real and alleged, that are brought to his notice, his career would be at an end.

It is a phase of alleged educational journalism—as against the legitimate effort—that I mean to discuss.

Considering the number of persons engaged professionally in educational work, as against those in other professions, and the number of publications representing their interests, the educational journals outstrip, in number at least, all others.

The professional journalist is a writer without being a schoolmaster. The average schoolmaster is a writer without being a journalist. But the step from the profession of teaching to that of journalism is more frequently attempted than is the reverse. While the journalist, on the one hand, does not try to be a professional schoolmaster, the schoolmaster, on the other hand, only too often enters the domain of journalism without even that preparation which is so necessary to fit a man for any vocation. But he goes farther. He jumps into the whole thing at once; becomes a publisher and editor, advertising and subscription solicitor. The result is that we are confronted today with too much amateur educational journalism. Not only are there journals that are national in character or represent the educational interests of a state, but there are numberless little sheets that aim to cover smaller territory. Their publisher holds that the county, town, or village must have its own school journal, even if the latter furnishes nothing more than four small pages of wishy-washy personal matter.

It is a remarkable fact that no class of journalism is more closely pursued by the scribbling parasite, the camp-follower, than is legitimate educational journalism of the present day. Let me give you an illustration of, at least, one class of these so-called amateurs, and show you the

effect they have, not only upon the publishing business, but upon educational tendencies.

This class consists of the cheap schoolmaster who is ambitious to rise in his profession, and who sees the opening in printers' ink rather than in meritorious effort on his part. He may be a writer, good, bad, or indifferent; but he does know something of the value of publicity. He finds that he can enter the publishing business as a side issue, while he draws his salary as a teacher. In the great number of meetings — national, state, and county — he gathers a little material for publication. Exchanges also are cheap.

The result is a small sheet, without color, without policy, which bears his name as editor and publisher, and which gives him an opportunity to put his own feeble products, together with such material as he may gather, into cold type. He can, if necessary, afford to nurse this amateur enterprise even at a loss. But he prefers to prey upon his fellow-teachers for subscriptions, and upon the business community for advertisements; he makes his friendship with his colleagues go as far as possible, and lets it be known that it will be dangerous to ignore him. The result is obvious; the numberless sheets which are thus fastened upon the schoolroom workers of the United States represent that much scattered energy. The field becomes less promising for the strong, fearless, high-classed educational journalist. Those milk-and-water sheets seldom traverse beyond their own county limits, but they nevertheless prevent the better journals from receiving the recognition in that field to which they are entitled.

Thus the number of educational journals printed and published as a distinctive business enterprise is not large. Few of these — indeed, very few — possess the financial strength to cope successfully with abuses in educational life, or to champion reforms, when their patronage, be it advertising or subscriptions, is at stake. I do not mean to infer here that the men who manage these legitimate enterprises lack either in energy or experience, or that they are wanting in high ideals.

Many journals, in order to make both ends meet, or to give the publisher an adequate income, become the agents for educational books, publish small books on their own account, conduct teachers' bureaus, or sell school supplies. The journal in such cases simply waves as a sort of advertising banner over an educational junk-shop.

You will ask how these evils which beset educational journalists can in any way concern you. They are simply evils, you will say, which affect the financial condition of certain enterprises only. But they do concern every loyal worker who has the educational interests of the nation at heart. Educational journals are an important factor, as has been demonstrated here today. They should be strong and fearless — combat that which is superficial and misleading, champion that which is worthy, noble, and true.

In order to make them so, they must have adequate support. There should be on the part of the educator a greater discrimination between the chaff and the kernel, between the meritorious and the worthless. It lies in your power to create a strong educational press, by recognizing only that which is worthy, and in permitting the law of the survival of the fittest to take its natural course.

In pointing out present evils, let us not undervalue the good that has been accomplished by the educational press. Who does not remember with gratefulness the men who have worked loyally in the cause of education thru their journals? Who can forget such schoolmasters as a Barnard, a Winship, a Kellogg, a Vaile, a Brown, and the many others who have taught for years and continue to teach large classes thru their periodicals? God bless them!

IDEAL AND PRACTICAL CONSIDERATIONS IN EDUCATIONAL JOURNALISM

BY OSSIAN H. LANG, EDITOR OF "THE SCHOOL JOURNAL," NEW YORK

The privilege of addressing large audiences of educational workers from ten to fifty times a year carries with it responsibilities of considerable magnitude. The periodical edited solely with a view to the promotion of selfish interests can hardly be considered educational, notwithstanding the claims contained in its name or its prospectus. There must be some educational aim, or aims, to begin with, some *motif* which gives character to a paper and reveals the editor's conception of his mission. For as the editor, so is his paper. This point might be very strikingly illustrated by reference to the annual crop of failures of educational journals which spring up simply because someone feels himself called upon to address an audience and to put himself into a position of prominence. I believe that no educational paper can hope to survive if it puts its personal, selfish interests first. It must go down, tho it may flourish for a while. A paper without a policy, a paper without a mission, must die, no matter what its journalistic qualities may be.

I believe, further, that the highest efficiency in educational journalism is unattainable without a clear insight into the present status and the theoretical and practical possibilities of rational educational endeavor. Lack in this direction implies instability of editorial policy and an unreliable judgment; new discoveries of lasting importance may then receive but scant attention, while insignificant matters and ephemeral sparks of success are magnified beyond all bounds of pedagogic reason; the beginnings of movements which promise better things are scoffed at or ignored,

while passing fads are heralded in with the sound of trumpets and cymbals; a person who discovers some glittering pedagogic bauble, or finds a new trick in teaching or school management, is praised as a benefactor of the race, while real contributions to educational progress are allowed to win their way unaided; revolutionary measures are advocated without any regard to their practical effects or dangers; vague illusionings are admired as new truths; juggling with pedagogic half-truths — "blanket terms," as Dr. White has very aptly termed them — is described as educational philosophy. The paper lacking here has no perspective, and can never hope to be a leader of the country's educational forces.

Honesty and consistency of purpose are other essentials; so are fairness and strict conformity to the principles of truth and righteousness. With it, and within it all, there must be a broad sympathy that can distinguish, below imperfections and mistakes, the sincerity of effort to work in the best light. An editor is occasionally accused of being "after something" when he points out commendable features in the work of an individual who may have come into his position by methods not exactly righteous on the surface, or whose early record has made him a lifelong victim of prejudice, or who happens to have the support of a clique of unscrupulous politicians. A rule of caution in this and similar instances is to consider the editorial attitude toward persons and measures in general, and to avoid hasty criticism of isolated cases.

On the other hand, the searching for commendable things must not degenerate into flattery of the undeserving. Here is where educational journals are more apt to sin than in any other direction. Why this is done can be answered with the same reason which explains why reform movements, rich with promise of better things, receive so little support as long as they are in their infancy or appear to prove unpopular.

Every journalistic effort represents an investment of money. The publisher must derive at least a small interest from this capital, and even editors require food, and terrestrial food at that. The publication of anything that is offensive to advertisers, or which does not meet with the approval of subscribers, is speedily followed, in most cases, by a reduction of the sources of revenue. Suppose that a reform is advancing which threatens to sweep away certain books or other apparatus now on the market, and involves a temporary increase of work for the teacher — study or what not — how do you suppose the advocacy of this measure will affect the income of an educational journal? I can leave this to you to answer for yourselves. The superintendent who has had the courage to introduce needed reforms in his schools will be able to form a particularly vivid picture of the result, especially if he considers that his teachers may bow to his new plans for fear of losing their positions, while most advertisers and subscribers believe their support to be essential to a periodical's subsistence. And the reason for supporting undeserving

men who happen to be in a position of power, or have been, are, or may be of use to publisher or editor? Well, "you can catch more flies with honey than with vinegar" would not be an evasive answer.

It is a mistake to conclude that an educational journal cannot afford to give offense to anyone. A publication of high intrinsic worth can make itself professionally indispensable to those who wish to keep abreast the times. Moreover, the excellence of its journalistic features will attract many. The style, alertness, illustrations, and general typographical arrangement are all important matters. The editor with ever-ready journalistic resources can accomplish more than one who is lacking in this direction. Being sure of the power to hold his audience, he can afford to be more courageous and to put the good of the cause ahead of all lesser considerations. Finally, with the growth of professional feeling among teachers, there will come a higher regard for truly representative periodicals. The multiplication of uncalled-for papers will be discouraged. Established publications of acknowledged soundness and leadership will be given universal support. There is no need of keeping one's "ear to the ground" in order to make a success of educational journalism. Leadership is the great requirement.

The educational journal ought to point the way to better things in education. It ought to uplift all along the line. Above all it ought to inspire readers with lofty ideals and an abiding faith in the elevating power of honest educational effort. I believe that it can and ought to be made the greatest agency of spreading an ennobling civilization. This it may do by judiciously pointing out where present educational practice admits of improvement. It must pour hot shot, if necessary, to drive the self-satisfied out of their trenches into the light of day. The paper that acts merely as a soporific in its attitude toward evolutional efforts and as a palliative in treating of specific cases of retrogression is a mere parasite on the profession. The magnifying of the teacher's office is not accomplished by hurrahing and sycophancy. I am reminded here of the incisive words of the secretary of the Massachusetts Board of Education, Mr. Frank A. Hill: "One of the strongest signs of an unhealthy state is perfect satisfaction with an existing state. Perfect satisfaction means easy satisfaction; easy satisfaction, a low ideal; a low ideal, cessation of growth; and cessation of growth, retrogression and stagnation." Here is set forth a measure by which to test true worth.

The educational journal must lead upward. It must lead teachers to gain a higher outlook upon the needs of humanity, to make steady progress in professional knowledge and skill, and to strive constantly for greater usefulness.

AN APOLOGY FOR THE AMERICAN UNIVERSITY

BY DAVID STARR JORDAN, PRESIDENT OF LELAND STANFORD JR. UNIVERSITY

Now and then in these days some successful business-man raises his eyes from his counter to question the American university's right to exist. "Does higher education pay?" he asks, and from his own experience of tireless energy, and from his own contact with thin-legged, white-faced collegians seeking a job, he gives to this question a qualified negative. He further claims, should he care to pursue the subject at greater length, that opportunities for higher education are too widely diffused, and that the American masses are victims of over-education.

If all this is true, it is time to call a halt and take account of stock. We have invested too much in universities — love and devotion, as well as bonds and gold — for us to be indifferent to their usefulness. In any case, it may be worth our while to spend half an hour in considering this question, even tho to you and me, who are not in success as a life business, such statements of men of business may seem belated and absurd.

It is certain, in the first place, that to speak of "over-education" is a misuse of terms. If education is rational and effective, there cannot be too much of it. It is not men trained and efficient who enter into destructive competition. It is the ignorant and ineffective who make the struggle for existence so dire a battle. Whatever leaves men weak and ineffective cannot justly be called education. There is nothing more useful than wisdom, nothing more effective than training, nothing more practical than sunshine. Surely no one can claim that the American people are too wise, too skillful, or too enlightened for their own good. Yet to give wisdom, skill, and enlightenment is the main function of higher education. It cannot give brains, courage, and virtue where these qualities were wanting before. It cannot make a man, but it furnishes the best known means to help a man to make himself. The gain thru self-building often outweighs in value the original material. It may be more important even than the finished product, as effort is a greater source of strength and happiness to man than final achievement.

What these critics usually mean to attack is misfit education — the training or straining of the memory rather than the acquisition of power to think and act. They mean that the colleges give schooling rather than training. They "teach young people how to talk rather than how to live." This is still true to some extent, in some places, but the whole tendency of university movement is toward reality and practicality. These critics have not watched this movement. They do not draw their

idea of a university from the powerful, well-organized institutions of the day, which lay hold of every various power of humanity and seek to draw it into effective, harmonious action. Rather they picture to themselves the starveling colleges of their youth, where callow boys were driven, against their will, over race-courses of study, no part of which appealed to their own souls or was related in any way to their lives. Such colleges and such ideals of education exist in our time, in certain forgotten corners, but they are in no sense typical of the American university of today. Harvard and Cornell, and the great and growing state universities of the West, are as firmly and thoroly devoted to the needs of American democracy as the modern harvester is to the needs of the American wheat fields.

No doubt inferior methods, dull, stupid traditions, can be found here and there under the name of higher education, as rusty or worn-out machinery exists under the name of agricultural implements. It is not by these that the best we have should be judged. No one knows better than our college authorities the misfits and failures of education. No one strives half so hard to prevent them, tho in all large enterprises no one can avoid a certain percentage of failure.

Not all the critics in business life taken together have done one-tenth as much to make education practical as has any one of the great university presidents of our time. Let us mention, for example, Eliot and White and Angell and Tappan. Under the hands of these men, and others like these, the whole face of higher education in America has changed in the last twenty years, and the change has been in every way toward greater usefulness and practicality. As the limited express of today compares with the cross-roads accommodation train, so does the American university we all know, or ought to know, compare with the college of twenty years ago. The little curriculum of the college, its Latin verses, mythology, mathematics, and dilute philosophy covered but a small arc in the grand circle. The entire range of the activities of men constitutes the field of the university.

The keynote of railroad progress has been usefulness to the traveling public. The limited express carries well, carries quickly, carries comfortably, accurately, and safely the multitudes of people who demand transportation. Its fresher paint, handsomer cars, and softer cushions are only incidental to this. So with the university of today. It aims to meet the needs of all men, whatever these needs may be, and of all women, too — all to whom higher training or higher outlook is possible. It meets these needs accurately, safely, and without waste of time or effort. Its greater size and greater impressiveness of buildings, libraries, and laboratories are only incidents. Its purpose is direct, practical, and unflinching. Those who criticise its results must take a broad view of its purposes. Because a Harvard man once drove a street-car in San

Francisco, or because some despondent invalid from Yale is seeking a third-class clerkship, is no indictment of Harvard or Yale any more than a chance tramp on a brake-beam is an impeachment of the management of a great railroad.

If the passengers in general rode on the brake-beams in preference to the coaches, it might give rise to an indictment. If the Harvard man of today cannot, as a rule, make use of his knowledge, if he cannot take care of himself and open the door of opportunity to others — if the more of Harvard, the less of man — then we may question Harvard's right to her endowments. But, as a matter of fact, this is not true. Among men in every walk of life, among our bridge builders, our preachers, and our mechanics, our teachers, our statesmen, and our naturalists, our bookmen, our physicians, our financiers, our electricians, our lawyers, and our journalists, the university men stand everywhere at the front. They are effective, enlightened, practical. They have had some one thing clearly in view; they have striven to do it, and to do it so well that their work needs no afterpatching.

It is true that this has not always been so to the degree that it is today. Once the college education was not related to life. It did not pretend to be. It had nothing to do with action. It was not even the foundation of scholarship. The scholars of the early days were as much self-taught as the merchants. The school training was discipline only, a drill in memory and discrimination, the things memorized and the things studied to be forgotten when real life began. The original investigator — that is, the real scholar, in any field, in language even — had to begin at the bottom when his college course was finished. He had to find his own materials, devise his own methods, and forge his own implements, just as the self-taught scholar had to do. The man with definite purposes saw his way to his goal outside of college, for the college would not swerve from its mediæval English ideals a hair's breadth to meet the need of the student.

Learning breeds vanity, someone has said; while wisdom is the parent of modesty. The old-time college student had learning. He learned rules by heart, and lists of exceptions. He learned the propositions of Euclid, and could repeat every corollary by number. If he studied science, this too was made a matter of names, definition, and exceptions. The best botanist was the one who knew the most Latin names of plants. The best historian knew the names and dates of most kings and the details of the greatest number of campaigns.

The college education was once valued for the feeling of superiority which it engendered. The bachelor of arts was as good as the best of men and better than most. "Of all horned cattle," said Horace Greeley, "commend me to the college graduate." He meant the kind which is filled with learning, with a fatuous vanity, which sprouted like

the calf's horns. If we define an educated man as one who has learned the secret of power in nature or life, he is not classified with horned cattle. He becomes a man, and to send forth such is the work of the university of today.

It is said by someone that the greatest joy on earth with certain women — greater even than the pleasures of hope and even the consolations of religion — is the "well-dressed feeling." We know what this is like and how it affects its possessor, even tho we do not share it ourselves. I saw an example the other day on a railway train. A lady, not graceful nor gracious nor beautiful, was dressed to her own perfect satisfaction. I could not describe the details, which had no special charm for me, but the aggregate was the sure feeling of being well-dressed. This showed itself in the expression of her face, at once haughty and beatific. The college degree of bachelor of arts conferred on our fathers the well-dressed feeling. They were at once haughty and beatific in the possesion of it, and to gain the degree, not to enter into the gathered store of intellectual power, was their purpose in running over the prescribed curriculum.

But whatever we may say of outworn methods, they were not without their successes. In these the old college found ample justification. Mental keenness follows mental friction. The spirit of comradery led to a higher spirit of friendliness and mutual help. The debating society, where alone — outside of school hours — real subjects were under discussion, laid the foundation of many a statesman's prominence on the floor of the Senate.

To spend four formative years in life not sordid has a moral reflex on the character. The weakest and most illogical college course may be far better than no college training at all. Men can make up for lost time. It is harder to make up for lost inspiration. The American college of the past was a feeble copy of the colleges of England. The American university of today draws its inspiration from the deeper, stronger currents of German scholarship.

An Oxford man criticises the great English aggregation of boarding schools, which modern needs are slowly and reluctantly molding into Oxford University. "Our men," he says, "are not scholars; our scholars not men." The old ideals of education still cherished at Oxford lead to this. Those called scholars — the dig, the grind, the pedant — are not men. Their worth is not related to life, and they are not trained for living. The other class — the athletes, the good fellows, the robust British gentlemen — these are not scholars. For the lines of thought and action which interest the live man are not yet reckoned as scholarship in England.

To know nature, life, art, one must go outside the tripos or three sacred pedestals of learning — Latin, Greek, mathematics — recognized by

the conventional college. To the university of Germany we go, or to the university of America, and in these institutions of reality every man in search of wisdom or power will find his efforts strengthened, his success hastened. The ideal of the American university of today is expressed in the words *constructive individuality*. It would build up scholarship and character, but always on the basis of the powers which nature gave the individual. It is no abstract or ideal man with which it deals, but real men, just as they are, the individuals as created — no two alike, each with his own divine gift of personality, which separates the man that is from all the men that are, or were, or ever will be.

I have used the words "college" and "university" in an interchangeable sense. This I have done on purpose, for I do not believe that the distinction, which seems to exist, and on which some writers have laid great emphasis, is one which can or ought to be permanent. From the extension of the college the American university has sprung, but every one of these institutions still includes, and must include, the college, which is the germ. Every successful college points toward the university, and, so far as is possible, it strives to become such. The university is the expression of thoroness of training, and without thoroness in something no institution can live.

It is said that the college is for the average man, the university for the exceptional one. But this is not true, as a matter of fact. The average man, the exceptional man, and the man below the average are found in all institutions. The "*bemoostes Haupt*," the moss-grown head, grown gray in the struggle for a degree, is well-known in the universities of Germany, while the smallest college of the prairies has been the cherishing mother of many a distinguished scholar.

The fact is that the college is a temporary feature of American educational history. The college is a small university, antiquated, belated, arrested, starved, as the case may be, but with university aspirations to be realized in such degree as it can. The strongest of these find an assured place by the side of the universities — Brown University and Amherst College, Wesleyan University and Williams College, Colgate University and Bryn Mawr College. These belong to a single general class, and differ only in name. Each gives the best and broadest undergraduate courses its finances afford, with as extended a course in graduate study as circumstances make possible. Harvard is the same in kind, tho its extension is greater, while the ambition of the college of the prairies is not less nor different.

As time goes on, the college will disappear in fact, if not in name. The best and richest colleges will become universities, following the example of Harvard, Yale, and Princeton. The others will return to their places as academies, fitting men for college, as they now try to fit them for the university. Every year shows both these forms of transition. In

the last ten years at least a half dozen of the California colleges have joined the ranks of the high schools, ceasing to grant academic degrees. In other western and southern states the same change has taken place. On the other hand, twenty institutions, which have prided themselves on their contentment as "mere colleges," have reached out, in one way or another, into graduate work, and many rest their best fame on the influence of some teacher whose originality and thoroness gave his work the true university character.

Since Eliot became president of Harvard University, the number of college students in the United States has increased perhaps a hundred fold. This is due to no educational fad, no passing whim of the hour. Young men and young women do not rush by thousands to the universities every fall because they seek social recognition, because their fathers went to college, because they need a college degree in their business, because of the glory of the football team, nor for any one of a hundred side reasons which might be conjured up. They go to the university because the university offers training which they want and which they cannot do without, except at a cost which will narrow and cramp their whole after-lives.

The student of today is far more advanced in thought and action than the student of thirty years ago. The graduate of Harvard under any of Eliot's predecessors could barely enter the freshman class in the Harvard of today. Not that he had not studied enough things or spent time enough on them, but because the work of earlier times lacked thoroness, breadth, and vitality. In one or two narrow lines some great teacher might make his work thoro and real, but that a student should actually know anything, so as to be able to make a place in life by means of such knowledge, was to most of Eliot's predecessors a new and dangerous notion.

This condition of things was changed, not by outside criticism, the chance slurs of men of business or men of leisure, but by inside growth.

It was thirty years ago that Agassiz told his associates that Harvard was no university — "only a respectable high school where they taught the dregs of learning." He recognized that for most men the sacred tripos was not the foundation of culture, but the dregs of culture. Its place of importance was assigned, not by hope, but by tradition. It was the same good old Harvard which Emerson blamed for never having led him to the tree of life. But even Emerson was appalled when the study of realities invaded Harvard College, and men began to give themselves, not to ideal and tradition, but to serious preparation for the work of life. Once he hinted that "a check rein should be placed on the enthusiastic young professor who was responsible" for the destruction of Harvard's time-honored symmetry.

In Agassiz' answer we touch the keynote of university progress — not to check the current of effort for symmetry's sake, but to stimulate all

possible forms of intellectual growth. "If symmetry is to be obtained by cutting down the most vigorous growth," he said, "it would be better to have a little irregularity here and there."

It is thirty years since Herbert Spencer startled the English educational world by his question: "What knowledge is most worth?" For the men of Oxford and Cambridge did not value knowledge for its worth, but rather for its traditional respectability. They defined a university as "a place where nothing useful is taught," and they had only contempt for "bread-and-butter learning," or knowledge related to daily life. This might do for the learned professions — law, medicine, and theology — but even for these the college gave no hint of direct preparation. Herbert Spencer answered his own question in favor of science, the facts and laws of human life and of external nature. These have a real worth to man, which the sacred tripos did not possess. On the belief that knowledge of all kinds has real worth to someone the modern university rests.

At Champaign, ten years ago, I had occasion to say: "The university should be the great refuge hut on the ultimate boundaries of knowledge from which daily and weekly adventurous bands set forth on voyages of discovery. It should be the Upernavik from which polar travelers draw their supplies. As the shoreless sea of the unknown meets us on every side, the same house of refuge and supply will serve for a thousand different exploring parties, moving out in every direction into the infinite ocean. After countless ages of education and scientific progress, the true university will stand on the verge, its walls still washed by the same unending sea, the boundless ocean of possible human knowledge."

The college of the past dealt chiefly with record and tradition. It sought no new truth and coveted no action. The college life was a period of restful growth, to be cherished for its fragrant memories. It was not a time of forceful struggle for heightened power and deeper wisdom.

The university of today is alert to all the problems of social and political development. The poorhouse, the jail, the caucus, the legislature, the army, the discordant demands of freedom and order — all these call for closest attention of the university student. While one man studies the law of heredity as shown in the structure of the body cells, another gives equal attention to the fate of the tramp and the pauper. One spends his strength on the economical transference of electric force, while another works on the conservation of honesty in the public service. There are just as many classical scholars today as there ever were, but they no longer bar the way to men of other powers and other tastes. The classics no longer close the door to other forms of culture. He who writes Latin verses still finds his place in the university, provided only that his verses are good enough to be worth writing. But he no longer occupies the sole place of honor, or even the front seat in the lecture hall. The man who

knows the steam engine has an equal place in the university and an equal share in the honors of scholarship. With the advent of realities, spurious honors disappear. It is not for the university to decide on the relative values of knowledge. Each man makes his own market, controlled by his own standards. It is for the university to see that all standards are honest, that all work is genuine. To do this, it must cast off many of its own shams of the past. Its titles and privileges, its prizes and honors, its distinctions and degrees, its caps and gowns, and chaplets of laurel berries — all the playthings and millinery of its youth it must cast away with its full maturity. These prizes of learning are but baby toys to the man of power. To send forth men of power the university exists.

The value of the university has been under discussion ever since the days of Alfred and Charlemagne, and each nation in each century has formed its own answer. Its value to a monarchy is not the same as its worth to a republic. Its value to the all-embracing church is not the same as its use to the individual man and woman. The church looks to the university for its defender and its apologist; the individual man for his own enlightenment and strength. The king looks to the university for agents and advisers, to democracy for the antidote to the demagog and spoilsman. Emperor William is reported to have said that "Bismarck and von Moltke were but the tools by which my august grandfather worked his will." To furnish the emperor with tools of such edge and temper is the function of the imperial university. Tools of a still more august ruler are the statesmen of America. Our Washingtons and Lincolns, our Sumners and Hoars, our Lowells and Emersons — all these are the tools by which the people of the republic work their will

To such needs the modern university is fully alive. Edward Everett Hale tells us that in 1860, when Robert Todd Lincoln entered Harvard College, bringing letters of introduction from Abraham Lincoln and Stephen A. Douglas, there was but one man in Harvard who had ever heard of Lincoln. This was Professor James Russell Lowell, who said at the time: "I suppose that I am the only man in this room who has ever heard of this Abraham Lincoln, but he is the person with whom Douglas has been traveling up and down in Illinois, canvassing the state in their new western fashion as representatives of the two parties, each of them being the candidate for the vacant seat in the Senate."

That Harvard was not long indifferent to what Abraham Lincoln stood for is shown by the roll of names in her Memorial Hall; the list of

> those whose faith and truth
> On war's true touchstone rang true metal.

Once awakened to her public duty, our great university has never since slept. Her hand is in all public affairs. Whatever is well done is permeated by her wisdom and zeal, and the courage and force of her sister institutions.

One can count on his fingers today, taking every one, university men without public office or likelihood of any, investigators and professors, who exert a greater influence in any political crisis than presidents and cabinets, than orators and agitators, than admirals and generals. The immediate responsibility for action rests with the temporary official, but behind the investigator is the power of eternal truth. Whatever men do or say or pretend, it is the truth that has the last word. This is so sure in the affairs of men that when truth appears plain before them they throw up their idle weapons and call her God or fate. And these, indeed, are other names for truth. For the worship of truth the university must stand, and there is but one formula for her ritual. He shall seek her patiently, untiringly. If perchance he find her, then shall he proclaim her without fear and without reserve.

The American university serves the American republic in several ways.

It intensifies individual force and effort. It takes a man's best abilities and raises them to the second or third or tenth power, as we say in algebra. The value of the college-bred engineer is recognized in the railroads, in the mines, in the factories. With the same willingness to work as the man who has learned engineering by rule of thumb, he has a far greater adaptability, a far wider command of resources. This fact may not appear in a day or a year; hence some men prefer the ordinary practical man, because he is less ambitious and can be had cheap. Sooner or later, however, a condition arises which shows the difference. The wise employer forecasts this and puts the responsibility on the man who is surest to carry it when the real trial comes.

What is true of the educated engineer is equally true in other trades or professions. The ignorant physician makes money because he deals with ignorant men, and the grave covers his blunders. But sooner or later truth turns her searchlight on pretense, and the educated physician and the fraudulent healer are no longer in competition.

The university of today has no new mission in these regards. Its purpose has simply broadened year by year till it covers the needs of every man with brains and conscience. Not only for the Greek-minded and Roman-minded men, but for the men of dynamos and sewer trenches, the breeders of sheep and the importers of silks; for the singer of songs and the writer of histories; for all men, of whatever calling, the university has its word of welcome, its touch of power.

The university should give to each man or woman a broader outlook on the world, the horizon of the scholar. No one has the right to the name of scholar till he knows some one thing thoroly, and enough of other things to place this special knowledge in right perspective. The more deeply one enters into his own thoughts, the more effective he is in accomplishing his own ends. The more broadly he enters into the

thoughts of others, the more clearly will he understand his own relation to nature and society.

Thru the medium of the university the student is brought face to face with great thoughts and great problems. The wise men of all ages and all climes become his brothers, and the consolations of philosophy to him are not meaningless words, but living and helpful realities.

The university is a source of personal acquaintance with the men and women who shall mold the times to come. The university "gathers every ray of varied genius to its hospitable halls, by their concentrated fires to strike the heart of youth in flame." Each university has some great teacher, at least some one who is relatively great. A great teacher leaves a great mark on every student whose life he touches. In my own education nothing meant so much to me as the contact with a few great men whom I knew face to face. Of these I place first Agassiz, with his abounding life, his fearless trust in man and God, and his vital interest in everything that man or God had done. "There is no hope for you," says Thoreau, "unless this bit of sod under your feet is the best for you in this world, in any world." Of such robust optimism was the spirit of Agassiz. No obstacle could break his courage, no failure could dim his faith. To feel the influence and to share the help of such men far outweighs the cost of any college course, even tho the college gave nothing else.

But there were many more among my teachers, each great in his degree. I cannot take the time to speak of each in turn, nor would it profit you to listen. Two names may suffice: Andrew Dickson White, the former high-minded and enlightened president of Cornell, the ideal of our class, the pioneer class of his administration in the new university of his hands. To us he embodied all that a scholar should be in the life of the republic. And such an ideal of the scholar in statesmanship President White remains to us today.

The other name is that of James Russell Lowell. I can hardly claim him as my teacher, for he did not know me by name or face. I was too young and too raw in his day to be knowable. Yet his rich voice and manly figure are indelibly fixed in my memory, and his noble face rises before me whenever I try to think of the duty of the scholar in the crises of the day.

"Once to every man and nation comes the moment to decide," and to have known Lowell brings a pledge for at least a conscientious decision.

But it is not alone thru the teachers that the university educates. The "fellow-feeling among free spirits," which has been called the essence of the German university, arises among the students as well. Among the college students are the best young men and women of our time. They shape each other's characters and mold each other's work. If the university does nothing else, it finds its justification in the friendships which

it gives. In Agassiz' eulogy on his friend and helper, Humboldt, he gives a most striking account of the influence picked men exert upon each other. Teachers and students alike in the University of Munich used to gather in Agassiz' own chamber, "museum, laboratory, library, bedroom, dining-room, fencing-room, all in one." Students and professors called it "the little academy."

Here they worked and talked and thought, and the discovery of one became the property of all, with the same cheerful generosity by which they shared their meals and their earnings. In the college you find the men you trust in after-life, and one who does not fail you there will never after give you cause for regret.

To the university we must look for the promotion of true democracy. Its function as a part of public education is to break up the masses that they may be masses no more, but living men and women; to draw forth from the multitude the man. The mass is the real foe of democracy, for the slave in all ages has woven his own lash. Where men are driven or sold like sheep, there the tyrant rules. It matters not whether the tyrant be a king in velvet and satin, or a ward boss in a slouch hat and striped waistcoat; when individual intelligence does not rule, men are governed by brute force.

The function of democracy, as I have said many times, is not good government. Its effect is to stimulate the people to broader outlook, to deeper interest in public affairs. It is not to make good government, but to make good citizens, that public affairs are confided to the common man. The feeling of caste is fatal to democracy. The fundamental tenet of civil freedom is equality before the law. In other relations it matters not what inequality develops; the more unlikeness among men the better, because the more varied the power and talents. But unlikeness is not inequality. As "God is no respecter of persons," so the law must not be. The state must show no favoritism. It knows no black nor white, no wise nor simple, no bond nor free. If it place one class above another, it is a democracy no longer, and it is not a democracy when any class of men tamely accept an inferior place as theirs by right of birth.

The old education seemed to accentuate the inequalities among men. This was because it took its traditions from aristocratic England, tho its real effect was to promote democracy. The great service of the state university, the cap-sheaf of the public-school system, is that it carries the university into democracy without impairing the essential qualities of either. It furnishes a plain way for every student, the highest as well as the lowest, from the commonest schooling to the training that gives the highest power. So long as the grass does not grow in the path from the farm house to the university, to borrow Ian MacLaren's phrase, so long is the republic safe. So long as the people can become enlightened and

wise, rich and poor alike, so long shall government of the people, by the people, and for the people endure upon the earth.

The need of democracy makes a special demand upon the scholar. "Eternal vigilance is the price of liberty," and to the scholar on his watch-tower the people look for this vigilance. It is the scholar's duty everywhere, in season and out of season, to uphold the sacredness of truth. He must possess, to quote Huxley's words, "some knowledge, to the certainty of which authority could add or take away neither one jot nor tittle, and to which the tradition of a thousand years is but as the hearsay of yesterday." The truth it is the scholar's privilege to speak, his duty to proclaim, and that he does this is the best justification of the university from which he drew his inspiration.

"Above all sects is truth." Above all parties and conventions, above all pride and prejudice and passion, arise the teachings of nature, the lessons of human experience. To hear these teachings, to learn these lessons, is the function of the university. To proclaim them wisely is the function of the scholar, and it is his mission to help permeate the republic with his scholarship. The university must place as fixed beacons in the swaying tides of democracy those men and women who can never be moved by feeble currents, who know what to do, who have the will to do it and the courage to abide the consequences.

And now, in a final word, I touch the university's highest value. There is no good in a man's work unless the man himself be good. The highest force of the university lies in its moral training. Not in its precepts and in its sermons, not by ceremonies and formulæ, are men influenced for good. If they were, moral culture would be the easiest of all teaching. Nothing costs less than words. But the experience of the ages shows that words count for little in matters like this. It is the contagion of high thought, of noble purpose, of lofty deed that "strikes the heart of youth in flame." "Science," says William Lowe Bryan, "knows no source of life but life. If virtue and integrity are to be propagated, it must be by people who possess them. If this child world about us that we know and love is to grow up into righteous manhood and womanhood, it must see how righteousness looks when it is lived. That this may be so, what task have we but to garrison our state with men and women? If we can do that, if we can have in every square mile of our country a man or woman whose total influence is a civilizing power, we shall get from our educational system all that it can give or all that we can desire."

Wisdom, as I have said elsewhere, is knowing what to do next. Virtue is doing it, and religion is the heart-impulse that finds reason for wisdom and virtue in harmony with the first cause at the heart of things. To these matters the university can never be indifferent. Wisdom, virtue, and religion alike it is its province to cultivate and intensify. It can

accept no shams in wisdom, still less in virtue or in religion; but a life without these is the greatest sham of all. The university cannot promote virtue and piety in any machine fashion. If the college stand *in loco parentis*, with rod in hand and spyglasses on its nose, it will not do much for moral training. It will not make young men moral nor religious by enforced attendance at church or at prayer-meeting. It will not awaken the spiritual element in their natures by any system of demerit marks. This the college of our fathers in English fashion tried to do, and with such ill success that the university of today bears among the ignorant the reproach of godlessness.

What the university can do is along manly lines. It can cure the boy of petty vices and childish trickery by making him a man, by giving him higher ideals, more serious views of life. It may win by inspiration, not by fear. It must strengthen the student in his search for truth. It must encourage manliness in him thru the putting away of childish things. Let the thoughts of the student be as free as air. Let him prove all things, and he will hold fast to that which is good. Give him a message to speak to others, and when he leaves the university you need not fear for him, not the world, nor the flesh, nor the devil.

The universities of America have grown enormously in wealth and power within the last twenty-five years. The next twenty-five years will tell the same story. They have the confidence of the people because they deserve its confidence, and the good citizens of the republic must give them trust and support. In the university, at last, the history of democracy must be written.

THE SCHOOL IN ITS RELATION TO THE HIGHER LIFE

BY HON. NATHAN C. SCHAEFFER, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, HARRISBURG, PA.

The best of French kings cherished it as the ambition of his life to make every one of his subjects so well off as to be able on Sunday to have roast fowl for dinner. Had he lived in our day, he would have included among the objects of his ambition a new bonnet for every woman at least twice a year. Roast fowl and new bonnets cost money; and money indicates the plane from which very many people look at every question of government and education. Money stands for what we eat and drink, for the garments we wear and the houses we live in, for the thousands of creature comforts which we deem essential to our well-being and happiness. Perhaps the school has not done all it is destined to accomplish in fitting the pupils to win these, but there is abundant

evidence to show that a good school increases the earning power of the individual, and thereby makes possible a fuller development of the higher life. The untutored red man eked out a scanty existence in spite of unparalleled advantages in soil and stream and climate; the intelligence begotten by the modern school has enabled our people to utilize and develop the material resources of the New World to such an extent that Carlyle sneeringly said: "America means roast turkey every day for everybody." I accept the remark as an acknowledgment that the American people are better fed than those of England or continental Europe; and yet Carlyle was right in hinting that there is a life higher than that which turns upon what we eat and drink and wear. The greatest Teacher of all ages did not despise the arts that win bread, for he worked at the carpenter's bench, and multiplied the loaves and fishes; but when he told the tempter that man shall not live by bread alone, he clearly pointed to a higher life, in default of which men and women can never fill their places as the lords of creation. The higher life rests upon the other as a basis. Where the vital energies of the people are exhausted in the struggle for bread, the very mention of education is a mockery. The school lays the foundation for the higher life when it increases the average earning power of the industrial classes, and thereby makes it easier for them to gain a livelihood. Here is the first point of contact between the school and the higher life. I know of no language sufficiently strong to condemn the spirit of the professor who, when he had demonstrated a new theorem in higher mathematics, exclaimed, "Now, that is true, and, thank God, nobody can use it!", just as if knowledge gains in value as its usefulness diminishes. (He was at the time drawing an annual salary of $5,000 in gold.) Only professors filling well-endowed chairs at our universities can afford to speak disparagingly of *Brotstudien*, and to advocate theories of education which would sunder the school from practical life. An education that unfits the pupil for bread-winning in case of necessity cannot be too severely condemned; among other reasons, because it fails to lay a proper foundation for the higher life. On the other hand, the school that does not aim at something higher than dollars and cents deserves equally severe condemnation. For that which makes life worth living cannot be bought with money. If you are rich, you may buy a fine house, but you cannot buy a happy home; that must be made—*made* by you and by those who occupy it with you. With money you may rent a pew in some fashionable church, but you cannot rent a good conscience; that depends upon your manner of living and dealing with others. Money will enable you to buy a fine copy of Shakespeare, but it cannot purchase for you the ability to appreciate a play of Shakespeare; that is the result of education. Wealth will enable you to cover the walls of your costly mansion with beautiful pictures; and the sewing girl, if she has been properly taught in our public schools, will get more enjoyment out

of them than the neglected sons and daughters of wealth and luxury. Plato wrote above the door of the academy: "Let no one enter here who is destitute of geometry." Why did he value geometry so highly? Not merely as an introduction to the study of philosophy, for in one of his dialogues he says: "God geometrizes." He had an idea that a youth in thinking the theorems of geometry is thinking divine thoughts. When Kepler discovered the laws of planetary motion, he exclaimed in ecstasy: "O God, I think thy thoughts after thee!" When a pupil learns to think the thoughts which the Creator has put into the starry heavens above us and into all nature about us, he is thinking God's thoughts and tasting the enjoyments of the higher life. When he is taught the right use of books and given access to a public library, he may acquire the power to think the best thoughts of the best men at their best moments. In nature study, in the reading lesson, in the teaching of science and literature, the school fosters the higher life of the pupil by enabling him to think God's thoughts and man's best thoughts as these are enshrined in creation and in the humanities. The objection is sometimes heard that the school makes the working classes discontented with their lot. "Teach a man to think," says the opponent of universal education, "and you make him dissatisfied with what he has and knows." If the school fixes the eye upon wealth, fame, glory, official position, and other things which can be attained only by a few, and which, when sought as the chief end of life, resemble the apples of the Dead Sea, turning to ashes on the lips as soon as they are tasted, then, indeed, the school may doom its pupils to a life of discontent and disappointment. But if the school fixes the eye upon the things of the higher life, things which are within the reach of every boy and girl at school, it lays the foundation for a contentment far transcending the possibilities of a life that turns upon feasting, office-holding, and the things that can be bought with money. It must be admitted that the exercise of the higher powers carries with it a certain feeling of discontent, but it is a feeling that conditions true progress and is not doomed to ultimate disappointment. The true test of what is preferable is the testimony of those who have knowledge of both modes of existence. Who that knows both does not value the pleasures of thinking above those of eating? Who would exchange the joy of doing right for anything attainable by the man who, for the sake of financial success, banishes ethics from his business or his politics? "Few human creatures," says Mill, "would consent to be changed into any of the lower animals for a promise of the fullest allowance of a beast's pleasures. No intelligent human being would consent to be a fool, no instructed person would be an ignoramus, no person of feeling and conscience would be selfish and base, even though he should be persuaded that the fool or the dunce or the rascal is better satisfied with his lot than they with theirs. . . . . It is better to be a human being dissatisfied than a pig satisfied, better to be a Socrates

dissatisfied than a fool satisfied. And if the fool or the pig is of a different opinion, it is only because they know only their own side of the question. The other party to the comparison knows both sides." Who would not rather be an intelligent working-man, seeking to better his condition, than an ignoramus contented with little because he knows nothing of the joys of the higher life? Life is full of contradictions and incongruities and disappointments. Over against these the school in its relation to the higher life has a duty to perform. For the discontent which springs from life's contradictions and incongruities a safety valve has been given to man in his ability to laugh. The person who never laughs is as one-sided and abnormal as the person who never prays. The comic is now recognized as one form of the beautiful, and the beautiful is closely allied to the true and the good. Without going into the philosophy of this matter, allow me to draw attention to the fact that beauty is at home in the domain of art as well as of nature; that the queen of the fine arts is poetry; that the greatest poet of all the ages was Shakespeare; that Shakespeare's literary genius reached its highest flights in tragedies and comedies; that, while tragedy and comedy are two forms of the beautiful in art, comedy is the highest form of the comic, and tragedy is the highest form of the sublime. In teaching us to appreciate the plays of Shakespeare the school not merely teaches us when to laugh and when to weep, thereby furnishing the safety valve to let off our discontent and to reconcile us anew to our lot, but puts us in possession of that which money cannot buy, namely, the ability to appreciate the beautiful in its subtlest and sublimest forms. Who owns the moon-lit skies, the millionaire or the poet? Who owns the hills and the valleys, the streams and the mountains — he in whose name the deeds and mortgages are recorded, or he whose soul can appreciate beauty and sublimity? Beauty has a home in nature and in art. It is the province of the school to put us in possession of the beautiful, the sublime, and the comic, for these, quite as much as the true and the good, belong to the things of the higher life. How about life's disappointments? Higher than the life of thought is the life of faith and hope and love — higher because these are rooted and grounded in the life of thought, ripen above it as its highest fruitage and efflorescence. The nineteenth century has been an age of faith. Every scientific mind has profound faith in nature's laws, in the universal efficacy of truth; and, like Agassiz and Gray and Drummond, multitudes of the best minds have made the step from faith in natural laws to faith in the laws which govern the spiritual world.

The common people evince a faith almost bordering on credulity in the readiness with which they accept the results of scientific research and investigation. Faith lies at the basis of great achievements. Bismarck declared that, if he did not believe in the divine government of the world, he would not serve his country another day. "Take away my faith," he

exclaimed, "and you take away my country too." While no religious test can be applied to those who teach in our public schools, our best people prefer teachers who have faith in the unseen, profound faith in the truths of science and revelation. In ways that escape observation the spirit of faith passes from teacher to pupil, and gives the latter a sense of something to live for and something to be achieved.

Faith begets hope. The hope of glory, of rewards in civil and military life, of immortality on the pages of history, has stimulated to deeds of heroism and self-sacrifice, and will continue to do so to the end of time. The higher life knows of higher objects of hope than these. Immortality on the pages of history is only an immortality in printers' ink. I wish my children and my pupils to cherish the hope of an immortality far more real than an immortality in printers' ink; I would implant in their hearts the hope of an immortal life in a world where the soul shall be robed in a body like unto Christ's risen body, which Stephen saw in a vision of glory and Paul beheld in a manifestation of overwhelming splendor.

Finally, that which makes life worth living is the life of love. Love of home and country, of kindred and friends, of truth and righteousness, of beauty in all its forms, of goodness of every kind up to the highest forms of the good—love of these makes life worth living.

The school makes possible the higher life when it lays the foundation for physical well-being and lifts the individual above an unceasing struggle for existence. It promotes the higher life when it teaches the pupil to think the thoughts of God as expressed in all his works, and the best thoughts of the best men as embodied in the humanities. It fits the pupil for complete living when it develops in him the power to appreciate beauty in nature and art, power to think the true and to will the good, power to live this higher life of thought and faith and hope and love.

PROFESSIONAL SENTIMENT

BY A. E. WINSHIP, EDITOR OF THE "JOURNAL OF EDUCATION," BOSTON, MASS.

My theme is "Professional Sentiment." Sentiment is the relish of life. Your entertainment thru the bountiful supply of fruit on the incoming trains, the wealth of beauty, the royal heartiness of Los Angeles, will help us to relish our work in the fifty states and territories, and the Lord only knows how many colonies. Teachers need the relish of professional sentiment for the good of the schools, for the advancement of their interests, and for individual satisfaction, prosperity, and influence. Sentiment is all aglow. It kindles life and imparts spirit. Physically it

is a rejuvenating force. Intellectually it is scintillating. Emotionally it throws a halo over all duty and responsibility.

Teaching more than any other vocation needs the physical, intellectual, and emotional benefit of the relish of sentiment. The juiciest steak ever grilled makes better fiber and force if it has the relish of pepper and salt, of Worcestershire or Tabasco. So teaching, the highest if not the holiest of professions, does most for the child, for the country, and for God when one teaches with a relish.

Teaching is a frightful strain. An overburdened curriculum, an unduly stimulating intellectual tonic, unreasonable financial demand, with the terrors of political interference, are a combination which may well make any teacher desperate.

Whatever adds to the flush of health of body, buoyancy of confidence, rest, peace, and joy to the emotional life, is of incalculable value. Sentiment may do this.

All the setting of a teacher's life is against sentiment, especially of the professional variety. Toward pupils, in the nature of the case, she assumes an air of superiority, and officially, toward principals, superintendents, and school board, an air of inferiority. With pupils her word is law. With officials their word is law. Both of these attitudes are antagonistic to sentiment, which demands freedom of action, thought, and emotion. Equality is indispensable to sentiment. This is foreign to the general life and experience of the teacher.

Legal documents class all persons in the great trio of occupation, trade, or profession. The specification always is that A. B. is by occupation, trade, or profession a blacksmith, banker, teacher, etc.

An occupation is primarily that which we occupy; secondly, that which occupies us, our time and energy, for a living. Man first occupied the land, took possession of the fruit of the soil for a living. Anything that is done for the sake of a living is an occupation. So long as man's desire and hope are merely that he may have for himself and for those dependent upon him the necessities and comforts of life, he is engaged in an occupation. If one teaches primarily for a living, he is spending his life in an occupation the same as tho he were grooming horses.

Trade is that in which one engages for the purpose of having something more than a living. He expects to put more time and energy into it than he would into an occupation. It never enters his mind that he is working for a living. He takes out of his business a good living, as much as he is entitled to on the volume of business done. A man failed recently, and the creditors met for consultation. He reported that he had drawn $30,000 a year for a living, and all said that was all right. Whatever a man does when his main purpose is to accumulate something, he is in general a trader. It may be banking or railroading, but it is in essence trade. There is little liability that teachers will become traders, and yet

within a few days a teacher in one of our cities advertised that he was short on stock, and must raise money immediately, and would sell his library at a great sacrifice. That man is evidently more of a trader than a professor.

Law is the grandest profession. A lawyer may do some things that a clergyman would not do, but the moment he does what lawyers think is unprofessional he is summarily debarred—it makes no difference who he is, how great his wealth or influential his position; and once out he can only get back to the profession or the practice of law by bringing forth fruits meet for repentance. No other profession has such reverence for precedent. To doubt precedent is a professional sin. Sentiment is sacred with the lawyer. He may not have half a living for several years, and yet he struggles on courageously and hopefully, dreaming of the great pleas of Randolph, Webster, and Choate. From law the professions grade downward.

Teachers cannot enjoy the luxury of professional sentiment until the remuneration is such that anxiety about a living is removed; until the possibility of being unceremoniously and unrighteously deposed is a thing of the past. The base line must be security in position, with a salary that shall remove all anxiety. Teachers cannot enjoy the inspiration of professional sentiment so long as there is reasonable doubt that capacity and merit will be the test of employment and promotion. The whole nation should rise up as one man and insist that elections, re-elections, and promotions shall be for merit. Then may we expect and insist that teachers shall prepare themselves for their high calling; that they shall study in their profession as do lawyers and physicians.

Of all the forces contributing to the relish of professional sentiment, no one thing is doing more than such a gathering as this, the largest and the best in our history. Fifteen thousand teachers, learning from nature and human nature, feasting upon a multitude of unusual luxuries such as Los Angeles has never given to politicians, bankers, or editors, inspired by the intellectual and professional contagion of a common cause and a noble purpose, are in position to send flashing across the continent, and ringing down the ages, as their motto: "Love and loyalty, for the child, our country, and our God."

Report of the Committee on Necrology

To the Members of the National Educational Association:

Your committee respectfully reports that twenty-six of our active members have passed away since our last meeting. Memorial sketches are submitted herewith.

The following are the names of these twenty-six, some of whom have been very prominent in the affairs of this association; these we shall miss especially, while we mourn for all.

George Sumner Albee	Oshkosh, Wis.
Joseph Baldwin	Austin, Tex.
Elizabeth Baumgartner	Springfield, Ill.
Hampton Bennett	King's Mills, O.
Leroy Decatur Brown	San Luis Obispo, Cal.
Anna McCombs Christy	East Grand Forks, Minn.
Henry Clarke Coon	Alfred, N. Y.
Luther W. Day	Canton, O.
John T. Gregory	Mobile, Ala.
Hosea Edson Holt	Boston, Mass.
William Jenkins	Chicago, Ill.
Daniel Winfield Jones	Boston, Mass.
Frederic Allison Lyman	Syracuse, N. Y.
R. M. Manly	San Diego, Cal.
Reuben McMillan	Canfield, O.
Hiram Orcutt	Boston, Mass.
George L. Osborne	Warrensburg, Mo.
Silas Saddler Packard	New York, N. Y.
Mrs. Frank Stuart Parker	Chicago, Ill.
John K. Rassweiler	Downer's Grove, Ill.
Andrew J. Rickoff	Cleveland, O.
Wilbur Vernon Rood	Akron, O.
Edward Searing	Mankato, Minn.
James F. C. Sickel	Philadelphia, Pa.
Wells Hawkes Skinner	Nebraska City, Neb.
Ellen G. Weeks	Sheboygan, Wis.

Respectfully submitted,

Edwin C. Hewett, *Chairman*,
Emerson E. White,
Albert R. Taylor,
Albert E. Winship,
Nathan C. Schaeffer,
Committee on Necrology.

Los Angeles, Cal., July 11, 1899.

George Sumner Albee

George Sumner Albee, late president of the State Normal School at Oshkosh, Wis., was born in Allegheny county, N. Y., May 23, 1837. He was a descendant of Thomas Clark, mate of the "Mayflower" and last survivor of that dauntless band, whose sturdy qualities were in his blood. He partook of the character of that wheat which was sifted as the living seed of a nation. He inherited a strong constitution and vigorous frame. His boyhood was spent on a farm, where he early developed a love for reading and study. With such advantages as the common schools afforded, he prepared himself to teach at eighteen years of age. He studied and taught in New York and New England until the fall of 1861, when he matriculated at the University of Michigan, and completed a full classical course in 1864. In the fall of that year he went to Peoria, Ill., as principal of the high school, and remained one year. He then took charge of the high school at Kenosha, Wis., and three years later accepted a call to Racine, where he rendered most efficient service as city superintendent.

At a special meeting of the board of regents of Wisconsin normal schools, held June 6, 1871, Mr. Albee was elected first president of the Oshkosh Normal School. He opened the school with a faculty of six members and a normal department of forty-six students, thus beginning at the age of thirty-four what may well be termed his life-work. From that time till September 4, 1898 — an unbroken period of twenty-seven years — he served with far-seeing judgment and untiring devotion the interests of the Oshkosh school and of normal education. Under his administration the building received three important additions, the faculty grew to thirty-four members, and the student body of the normal department to an annual enrollment of seven hundred — all constituting the largest normal school in the state.

No full discussion of the qualities of administration and character by which this result was achieved can here be made. First, but not greatest, among the few that may be briefly stated were sound and broad scholarship and a well-balanced sense of educational values. President Albee's own mind had been disciplined and cultivated by a liberal and well-rounded education that was psychologically complete. As a result of this he had an understanding of the methods and sense of the values of different fields of knowledge which led him to seek to develop equal strength in the different departments of his own school. To that end he selected the faculty with the utmost care and held steadily before the students the scholarly ideal.

To these qualities he added remarkable open-mindedness. He held that all results and all conclusions in every field of knowledge are related to an unknown increment that waits to be revealed. Openness to new truth and the wish to learn from events were, therefore, distinguishing traits of his administration. He never regarded new things as "fads," but saw beyond the mere fashion to the educational principles involved. Hence, tho he was never led away, he knew not whither, by an undue valuation of each new phase of education, he nevertheless welcomed each as a fresh and helpful guide to a completer application of fundamental educational ideas.

The quality of constructiveness was a strong element in his character. His thinking and effort along every line were distinctly cumulative. He had the architect's love of strong foundations, and the builder's sense of responsibility for rearing a structure that should be enduring and worthy to endure. He early felt the need of laying state-wide foundations for normal work in the interests and affections of the people, and sent out in 1872 the first normal-school institute conductor in Wisconsin to meet teachers and people in remote sections with a message regarding the foundation of principles of education and the character and purpose of normal training. He was the pioneer in many forward movements in the normal work in Wisconsin, and probably more than any

other one man helped to make teaching a profession in the state. He was always active in teachers' associations, always in sympathy with educational reforms, and in good fellowship with educational men. His ideals were ever growing, but they were never those of the sentimentalist and the dreamer. They were characterized by intellectual saneness, and back of them was the virtue of action. His knowledge of his own school was intimate and thoro; his administration direct and simple; his relations with his faculty close and friendly; and his desire to serve his students unbounded even by the limit of his physical strength.

The greatest of his powers was moral earnestness, that quality without which no teacher was ever truly great. His moral insight was deep and clear. He saw right and duty in the concrete, and his influence was tonic in that he expected others to see them so. Work became more interesting and purpose took a deeper hold in the presence of his personality. He had that heart power which transfigures work into a missionary enterprise for improving the lot of those within reach.

Perhaps the culmination of his successful career lies in this, that, after many years of varied and unresting energy expended in the cause of better education, he passed on into the unknown future with ardor for his work still warm, his hope of clearer vision still undimmed. Life was still fresh to him; the world still offered novelty and the joy of pursuit. He died as he had lived, a strong, patient, earnest, quiet man. His works live after him.

ROSE C. SWART.

Joseph Baldwin

The paternal ancestors of Joseph Baldwin were Quakers, and came from England to America with William Penn. His maternal ancestors were Scotch-Irish, his mother's great-grandfather being a Murray, whose lineage ran back to the unfortunate Mary, queen of Scotland. The father of Joseph Baldwin was a native of Virginia, and he served as a volunteer of that state in the war of 1812. In 1818 he moved from Virginia to New Castle, Pa., where, October 31, 1827, Joseph was born. His death occurred January 13, 1899. He had been a prominent member of the National Educational Association since 1883.

From his father, who was a farmer and a teacher, the son acquired the habits of hard work and the love of learning which characterized his life. His early education was obtained in the district school, and he prepared for college at Bartlett Academy, New Castle, from 1846 to 1848. In the autumn of 1848 he entered Bethany College, Virginia, where he was fortunate indeed in having Alexander Campbell, then at his best, and other distinguished scholars as his teachers. He graduated from Bethany College July 4, 1852, with the degree of A.B.

In August, 1852, he married Miss Ella Sophronia Fluhart, of Ohio, who, with seven children, still survives him. Immediately after his marriage he took charge of the Platte City Academy, Platte county, Mo. He next taught at Savannah, Mo., for three years, leaving there in 1856. In 1857 he helped to organize the Missouri State Teachers' Association in St. Louis, and was elected vice-president. This meeting was rendered famous by the presence of Horace Mann, from whom Joseph Baldwin received helpful inspiration.

After teaching four years in Missouri, the subject of this sketch decided to go back to his native state, and for a year he conducted very successfully the Lawrence County (Pa.) Normal School, and, having received the degree of A.M. from his alma mater, he attended the Millersville Normal School, then under the able management of James P. Wickersham.

From 1857 to 1867 he conducted private normal schools in Indiana — two years in

Burnettsville, four years at Kokomo — discontinuing in 1863 to enter the army; and again, in 1864 to the beginning of 1867, at Logansport. During this period of ten years he worked incessantly to promote the cause of education in Indiana by teaching hundreds of young men and young women, conducting institutes, and delivering public addresses.

In the spring of 1867 he again turned his attention to Missouri, and in April he moved with his family to Kirksville, Mo., where he opened a private normal school in the September following, having associated with himself W. P. Nason, J. M. Greenwood, Mrs. Amanda A. Greenwood, Frank L. Ferris, and Mrs. Kate Ferris. This school was wonderfully successful from the beginning, and in two and a half years was adopted by the state as the First State Normal School of Missouri. In 1874 this was the largest school west of the Mississippi river, with a boundless field of usefulness before it. For fourteen years Mr. Baldwin lived and labored in Missouri. During this period he delivered more than a thousand addresses to the people of the state, and aided in every possible way to make Missouri a leader in all educational movements in this country. He filled the teachers of Missouri with enthusiasm which has never waned. He planned, wrote, and spoke always for better schools, and always urged that the children of Missouri were entitled to the best. For fourteen years, during the prime of his life, he put his whole soul into the school system of Missouri, and accomplished more for the cause of popular education than any other man in the state during that period.

In 1881, with many regrets, he resigned his position at Kirksville to accept the principalship of the State Normal School at Huntsville, Tex. He said: "I go to Texas to aid in building up one of the best school systems on the continent." Here he worked, with his accustomed vigor, for ten years in the interest of the State Normal School. In 1891 the regents of the University of Texas created the chair of pedagogy and unanimously elected Joseph Baldwin professor, which position he ably filled till 1897, when he was made professor emeritus of pedagogy, which position he occupied at the time of his death.

In June, 1891, the degree of LL.D. was conferred on Joseph Baldwin by Bethany College, Virginia. Of the distinguished American educators none has left a deeper impress on any three states than did Dr. Joseph Baldwin on Indiana, Missouri, and Texas. He marked out as a pioneer the normal-school systems of these three states. He spent thirty-four years in his special line of work, training teachers to teach the children.

J. M. GREENWOOD.

Elizabeth Baumgartner

Miss Elizabeth Baumgartner was the second daughter of her parents, and was born January 14, 1857, in Jo Daviess county, Ill. She died, after a painful illness, at the home of her sister, in Warren, Ill., on June 17, 1898. At a very early age she was thrown upon her own resources, and made her way by her own industry, pluck, and good sense. She worked for her board while pursuing her studies at the high school in Apple River, Ill. After graduating there, she taught country schools for several terms in Wisconsin and Illinois.

From her meager compensation she saved enough to attend the State Normal University, at Normal, Ill., for one year. She then taught for a time in the high school at Shullsburg, Wis. Returning to the normal school, she graduated with high honor, in the class of 1880. After teaching for a time in Gardner, Ill., she was appointed training teacher in the schools in Springfield, Ill. This position she filled with great credit for fourteen years, till she was struck down by fatal illness. She was excused from service for one year, during which she made quite an extensive tour in Europe. She became a member of the National Educational Association in 1896.

Miss Baumgartner was a woman of physical vigor, bright intellect, happy disposition, and great energy and force. As a teacher she was earnest, untiring, and successful. Her early death leaves a void in the ranks of true educators and in the hearts of a multitude of devoted friends. E. C. H.

Hampton Bennett

Hampton Bennett was born in Union county, Ind., February 2, 1832, and died at his home in Carlisle, O., June 5, 1898. He was a life member of the National Educational Association for nearly twenty years.

His father moved in a cart from Virginia to Indiana, then a new state, where he became a large landowner. At the age of nineteen Hampton could scarcely read or write, but he determined to obtain an education. From the district school he went to Haughton's Academy, at Liberty, Ind., and from this school to Antioch College, Ohio, then presided over by Horace Mann, who ever remained Mr. Bennett's ideal of manhood and his model teacher.

He remained about four years in Antioch, and then took charge of the schools of Germantown, O. While there, the Civil War broke out, and he enlisted in the army. He served in the signal service four years, a part of the time under General John A. Logan.

On his return from the war he again took charge of the Germantown schools, but soon resigned to accept the superintendency of the schools of Franklin, O., a position which he filled with efficiency until 1895 — twenty-nine years — when he resigned, owing to failing health.

He was one of the examiners of Warren county for thirty years, being chairman of the board for twenty years. As county examiner he took an active part in the examination and graduation of pupils completing the course of study in the rural schools, an experiment that led to the enactment of the "Boxwell Law" — a unique feature of the Ohio school system.

Mr. Bennett was a man who had the courage of his strong convictions. He believed that a teacher's habits should be worthy examples for his pupils, and every male applicant for a certificate was asked the question: "Do you use tobacco?" — a question that would have delighted Horace Mann.

Hampton Bennett was a man of sterling integrity and high character, and an educator who honored the profession.

LeRoy Decatur Brown

The subject of this sketch was born in Noble county, O., November 3, 1848, or about the time the world was hearing of the glories of California; and, a half century after, in that land of gold and flowers, he rested — life's fitful fever over.

The secret of his success, dependence upon himself, he learned in the school of hard labor in the shop and on the farm. Here, also, he learned that love of nature which was one of his clearly marked traits.

Brought into close contact with a modest township library, a habit of reading took a fixed hold upon him. After getting what the country school had to give, he entered the graded school of the county seat.

In 1866–67 he began teaching. Soon after he became a student of the Ohio Wesleyan University, at Delaware, O., leaving at times to earn by teaching the money needed to continue his college course. In good time he was graduated from this institution.

Mr. Brown filled with credit a number of responsible places in his native state, among

them the superintendency of the schools of Eaton and Hamilton. From 1884 to 1887 he was state commissioner of common schools.

In 1888 he became a life director in the National Educational Association.

Going west in the vain search of health, he served the Nevada State University, at Reno, as president, and the public schools of Los Angeles as superintendent.

In a memorial service of the Ohio Teachers' Association, several speakers who in their early life had been brought into close association with Mr. Brown made mention of the exceeding helpfulness to them of that companionship. J. J. BURNS.

Anna H. (McCombs) Christy

Anna H. (McCombs) Christy, the wife of Professor A. B. Christy, died in St. Paul on March 31, 1899. She was born in Portage county, O., May 1, 1845, and was married in 1872. She became a member of the National Educational Association in 1897.

She was possessed of an "acute and ready understanding and excelled in her studies" from childhood. After her marriage she joined her husband in his studies and in his professional work. They graduated together from Mt. Union College, and taught together for some time. For seven years he was superintendent of schools, and she was principal of the high school, in East Grand Forks, Minn. "Mrs. Christy was highly capable and successful as a teacher. Working hand in hand with her husband, she achieved a position of recognized eminence, and left an enduring name in educational circles." E. C. H.

Henry Clarke Coon

Henry Clarke Coon became a member of the National Educational Association in 1897. He was the son of Ezra and Cyrene (Burdick) Coon, and was born in Otsego county, N. Y., January 28, 1828. He was of Scotch-Irish descent, and his ancestors came to New York from Rhode Island. Like many another boy who has risen to eminence and usefulness, he spent his early days in the activities of farm life, and got his early education in the district school. He afterward studied in De Ruyter Institute and Alfred University, from which he graduated in 1868. He took postgraduate work in Cornell University, and in extended private study, for which he received several honorary degrees.

He taught three years in De Ruyter Institute, and in 1872 he was placed at the head of the department of physics and chemistry in Alfred University. This position he held until his death, May 9, 1898. He was a member of several scientific associations, among them the American Association for the Advancement of Science and the American Microscopical Society. Professor Coon was twice married, and his second wife survives him.

He was a faithful and earnest teacher, amiable and benevolent in his daily life, an active worker in the church, and a citizen interested in all the questions of social and political life. Just before his death he published a manual of civil government, which has been received with much favor. E. C. H.

Luther W. Day

Luther W. Day was born in Richland county, O., November 24, 1839. He entered the district school at the usual age, and had the advantages which the average country school then furnished. With the determination to obtain a better education, though he

must work for it, he left home at fourteen years of age and entered the high school of Galion, O. At the end of three years he completed the course, and began teaching in Monroe county, O., when only seventeen years of age. He continued teaching until he was able to enter Hillsdale College, Michigan.

Before finishing his college course he enlisted, on August 6, 1862, as a private in the 100th Ohio Volunteer Infantry. He was engaged in the campaigns of Murfreesboro, Knob Gap, and Stone River. For his gallant conduct in the battle of Stone River he received promotion on January 1, 1863 — a richly merited New Year's gift. In 1863 he was assigned to General Garland's staff as a topographical engineer, with the rank of lieutenant. On December 17, 1893, he was honorably discharged on account of disability — a disability from which he never fully recovered.

In 1866 he accepted a position as teacher in Marion, O. Soon after he was elected to the principalship of the Galion High School — the school in which he had prepared for college. Two years later (1868) he was called to the principalship of the Heights Grammar School, in Cleveland, O. A short time after this he was made supervisor of the grammar schools of Cleveland, holding the position until 1882, with the advantage of being under the supervision of Superintendent Andrew J. Rickoff. From 1882 to 1886 he was supervisor of grammar grades and assistant superintendent under Superintendent Burke A. Hinsdale.

In 1886 Mr. Day succeeded Dr. Hinsdale as superintendent of the Cleveland schools, filling the position with great fidelity and success until 1892. Among the wise reforms in the conduct of the schools instituted by Mr. Day was the abolishing of promotion examinations in the lower grades, substituting in the primary grades the recommendation of the teacher.

While in Cleveland, Mr. Day was closely identified with educational work in the state and in the nation. He was a member of the Northeastern Ohio Teachers' Association, of which he was at one time chairman; of the Ohio Teachers' Association, of which he was president, and of the National Educational Association, of which he became a life director in 1888. For several years he was secretary of the Department of Superintendence of the National Educational Association. Mr. Day received the degree of A.B. from Hillsdale College in 1866, and the honorary degree of Ph.D. from one of the colleges of his native state.

After the severance of his connection with the Cleveland schools he was offered the superintendency of the Lancaster Reform School, of the city schools of Omaha, Neb., and of the schools of Yonkers, N. Y.— all of which positions he declined.

In 1895 he accepted the superintendency of the public schools of Canton, O., doing very successful work, and receiving the highest commendation of the board of education and of all persons interested in the work of the schools.

After a long period of sickness Mr. Day departed this life March 16, 1899. His remains were taken to Cleveland for interment, and the funeral afforded an opportunity for his former associates and friends to show the high appreciation in which he was held The public schools of the city were closed, their flags were at half-mast, and the church was filled with teachers, members of the board, and other associates and friends. The services were conducted by the Forest City Commandery, Knights Templar, of which Mr. Day was a past commander.

Mr. Day was a Christian gentleman. His whole life bore testimony to this truth. One of the strong characteristics of his personality was the purity of his thought and life. He saw what was beautiful and true in his surroundings and in all with whom he was associated. He was always loyal to his high ideals. E. E. WHITE.

John T. Gregory

In the death of John T. Gregory the cause of education, not only in his own state, but in the national councils, lost one of its ablest and most progressive young leaders. And for that leadership he was eminently fitted by high native endowments, thoro education, strong enthusiasm for his profession, and lofty Christian character.

He was born in Lauderdale county, Ala., March 6, 1866, and died September 14, 1898, at the home of his parents in that county, after an illness of several weeks, of fever contracted on the visit to the meeting of the National Educational Association in Washington.

Mr. Gregory's early education was under the tuition of his father, E. S. Gregory, a school-teacher from Philadelphia, who at an early date emigrated to the state of Alabama. He entered the State Normal College, Florence, Ala., in 1880, graduating there in 1884. Of him at that period President M. C. Wilson of the State Normal writes: "He was always apt in his studies and fond of play; ambitious beyond his strength; of a singularly lovable temper, always smiling, even in defeat. He was firm in his stand for a principle, regardless of consequences. He was a devout member of the Methodist church, a dutiful son, and especially thoughtful of his invalid mother. His most prominent trait was his modesty; he would blush like a girl at any coarse language, and was altogether one of the purest young men I ever knew."

He entered the Alabama Polytechnic Institute, Auburn, Ala., in 1886, graduating with distinction in 1888. Thruout his course in this institution his career was of the same high character as described by President Wilson. He was a painstaking, accurate scholar in all that he attempted, enjoyed the confidence and esteem of all the faculty, and finished his course near the head of his class.

In October, 1889, he went to the city of Mobile as assistant in the Boys' Senior Grammar School, which position he held for four years. He finally became principal of the Boys' Junior Grammar School, which position he held at the time of his death. Of him Superintendent Yerby writes: "I never saw a better organizer or a more progressive teacher."

Mr. Gregory was active in Sunday-school work, and for several years was a member of the official board of the Government Street Methodist Episcopal Church.

He became an active member of the association in 1895. For 1897–98, and again for the present year, 1898–99, he was state director of Alabama by election. His years, tho few, were crowded with good work, and the future lying out before him seemed to hold still better things. He fell in the full vigor of young manhood, and in the first flush of his robust faculties. The educational profession of his native state laments his untimely death.

CHARLES C. THACH.

Hosea Edson Holt

Mr. Hosea Edson Holt was born in Ashburnham, Mass., February 17, 1836. His parents, like many other New England people, were refined and well bred, but, having a large family, had to struggle against poverty. Of fourteen children, eleven lived to grow up. All the children were musical in a high degree.

Mr. H. E. Holt learned the trade of a piano tuner, and was considered excellent in his calling. He was very mechanical, and when hardly more than a boy was often called upon to set up new machinery which others failed to adjust properly.

At the age of seventeen he began to teach evening singing schools. After a day's labor he would drive to some town several miles distant to teach. He played the violin in his schools.

He enlisted as a private in the Forty-fifth Regiment of Massachusetts Volunteers, during the Civil War, and served nine months. On his return from the war he decided to turn his whole attention to music, and went to Boston and studied at the Boston Music School. Mr. Holt taught in Wheaton Seminary, Norton, Mass., several years; four years in the State Teachers' Institutes, and four years in the normal school at Bridgewater, Mass., at the same time giving private instruction. While teaching at Bridgewater, he applied for the position of instructor of music in Boston public schools, and was appointed in 1868. This was at the suggestion of Mr. John D. Philbrick.

The personality of Mr. Holt was always felt, and none the less in this new capacity as instructor of music in the schools of Boston. He began to improve the methods of teaching music in public schools, and continued this until the day of his death. He was one of the owners of the Mason National Music Course. He originated the Normal Music Course, Mr. John W. Tufts writing the music to conform to Mr. Holt's pedagogical ideas.

Mr. Holt had no vices and few faults. He was a true husband, a loving father, upright, tender-hearted, and honorable in his dealings. He was one of the teachers that are born, not made. Hampered by the lack of complete school education, he was, nevertheless, able to conceive grand possibilities, founded on the best educational principles. His education was derived from a study of man and the laws which govern his being, rather than from a study of books. He was essentially a self-made man. Mr. Holt was always an enthusiast in his profession. Few men have had equal power in teaching either teachers or children. He was always a man of ideas and of ideals, and he would never compromise either for personal advantage. He died ardently beloved by thousands who had been benefited by his intense personality as a teacher and leader in the musical world. He passed into the higher life October 18, 1898, at his home in Lexington, Mass, where he had resided for twenty years.

William Jenkins

William Jenkins, the son of Thomas and Mary (Davis) Jenkins, was born November 25, 1844, near Rome, N. Y. He died, after a brief illness, in Chicago, August 29, 1898. He fitted for college at Rome Academy, and graduated in 1867. He taught two years in New York, and then removed to Illinois. For six years he taught in the schools of Ottawa, and then became superintendent of schools in Mendota, West Side, where he remained eighteen years.

In 1893 Mr. Jenkins had charge of the educational exhibit of the world's fair at Chicago, and afterward wrote a history of that exhibit. He then took charge of the schools in Dixon, Ill., where he remained three years. He was always active in the school affairs of the state, and served one term as president of the Principals' Association and one term as president of the State Association. He became a member of the National Educational Association in 1886. He was married, in 1870, to Miss Cornelia Thayer, of Princeton, Ill. She, with one son and one daughter, survives him.

Mr. Jenkins was a careful student of educational subjects, was tactful and skillful as a manager of schools, and was generally a social favorite. E. C. H.

Daniel Winfield Jones

Daniel Winfield Jones was born in Lee, N. H., November 7, 1829. He was educated in the district schools of his native town, and later graduated from the Putnam High School of Newburyport, Mass.

For four years he was engaged with his father in the lumber business, but the duties

being too arduous for him, he turned his attention to teaching, for which he had an especial liking, taking charge of the town school of South Newmarket, N. H.

In 1854 he went to Portsmouth, N. H., as master of the grammar school. October 11, 1859, he was married to Miss Emma Cleaves, of Portsmouth, and came directly to Roxbury as master of one of the schools. In due time Roxbury was annexed to Boston, and he became a Boston master.

He became a life member of the National Educational Association in 1870.

When the Lowell School was organized, in 1874, he was transferred to it, and made the Lowell one of the best schools in the city. He remained the principal of this school until his death, November 27, 1898.

Mr. Jones was an enthusiastic, devoted, and eminently successful schoolmaster. For forty years he was a force among the Boston teachers. He came to Boston in the days when capacity counted for more than training. Altho without college or normal-school education, he was a natural student, an intelligent reader, and a clear thinker. He blended in an unusual way professional independence and loyalty.

In Boston alone more than four thousand boys and girls came under the sway of his leadership, and practically no one of them failed to carry out into life the impress of his character. Few Boston teachers of his years took so many special courses of study in the Institute of Technology and under specialists. He was a student to the day of his death. No professional movement in Boston, in Massachusetts, or in New England failed to receive his hearty indorsement or to enlist his ardent championship. No Boston teacher was more respected by the school board, by the teachers, and by the public, as none was more beloved by his pupils.

Frederic Allison Lyman

Mr. Lyman was born April 22, 1864, at Columbia, Conn. He died July 17, 1898. He became an active member of the National Educational Association in 1897. At the time of his death he was musical director in the schools of Syracuse, N. Y., a position which he had held since 1888.

He showed a decided talent for music at an early age, and pursued his studies in that subject in Hartford, Providence, and for four years with John W. Tufts, of Boston. At the age of sixteen he taught school in Rhode Island; he also had charge of music in the schools of Woonsocket, in the same state, for two years just before he went to Syracuse. He taught music extensively in the summer schools at Martha's Vineyard and Lexington, Mass., and in the state of New York. He also did much as choir director and soloist in church services. He lectured much and wrote upon his chosen subject, completing a book during the severe sufferings of his last sickness. "His work in Syracuse will stand as a lasting monument to his ability as a teacher." Mr. Lyman was an enthusiastic member of the Masonic fraternity and of the Sons of Veterans. He leaves a wife to mourn his loss.

E. C. H.

R. M. Manly

R. M. Manly was born in Dorset, Vt., in 1822. He was educated at Wesleyan University, Middletown, Conn. He began his life-work of teaching as principal of the Troy Conference Academy, Poultney, Vt., and subsequently at Conference Academy, Sanborntown, N. H.

During the Civil War he served as chaplain of the Sixteenth Regiment of New Hampshire Volunteers, and later as chaplain of a Virginia colored regiment.

At the close of the war he became state superintendent of education of Virginia,

under the Freedman's Bureau. His chief life-work consisted in establishing and conducting for twenty years the Normal School for Colored Teachers at Richmond, Va.

In 1885 Mr. Manly and his wife accepted positions as teachers of English composition in Wellesley College, Massachusetts, where they continued to teach for seven years, until Mr. Manly's failing health forced their removal to a milder climate. They resided for three years among friends at Dalton, Ga., and subsequently at San Diego, Cal., where Mr. Manly died September 16, 1897.

He had been a life member of the National Educational Association since 1870.

Mr. Manly was known by his associates, friends, and pupils as a teacher of rare scholarship and culture, and of noble Christian character. Chief among his comforts during his last illness was the knowledge which came to him of the noble work which was being done thruout the South by the four hundred colored teachers who had graduated from the normal school in Richmond which he had founded and fostered.

Reuben McMillan

Reuben McMillan, a life member of the National Educational Association since 1879, was born in Canfield, Mahoning county, O., October 7, 1820. His father was born near Burlington, N. J.; his mother in Cumberland county, Pa.; both were of Scotch-Irish descent. His early education was largely due to his own determination. Having received, in the public schools and by private tuition, some instruction, at the age of thirteen years he commenced to learn the trade of harness-making, and continued so engaged for four years, within which time he also studied Latin and other branches.

In 1837 he determined to obtain an academic education, and during the following two years taught school to obtain means to meet his expenses while in the academy. From 1839 to 1843 he employed his time in a similar manner, and in the latter year entered as an assistant in a private academy, and continued thus engaged until 1845. During the winter of 1845–46 he, under private tuition, engaged in the study of anatomy and physiology, also geology. Then he commenced the work of teaching and studying, and such were his occupations until his retirement, twelve years ago.

Mr. McMillan never entered college, never sought college honors, but the honorary degree of master of arts was conferred on him by the Western Reserve College, without his solicitation or knowledge. In 1869 he was elected superintendent of the Union Schools in Hanoverton, Columbiana county, O., and subsequently he filled the same position at New Lisbon, in the same county, for two years. Being troubled with ill health, he tried farm life in summer time, and during the winter season was principal in an academy.

Mr. McMillan's first connection with the public schools of Youngstown was in 1853. From that year until 1855 he superintended the public schools in that city, and in the latter year took charge of the schools at Salem, where he remained until 1861; then, returning to Youngstown, he acted in the same capacity until 1867. In this year he was offered the superintendency of the city schools of Cleveland; but, in consequence of failing health, he declined, and retired from active life for the five years following. In 1872 he again took charge of the schools of Youngstown, and remained at the head of that city's educational institutions until he retired permanently, March 31, 1886.

Mr. McMillan was a Presbyterian, being a member and an elder of that denomination for many years prior to his death. As proof of the high esteem in which he was held in the city of Youngstown, with which the larger part of his life was identified, its beautiful public library bears his name. He was a noble man, upright and lofty in character as he was in stature, for he towered six and one-half feet in height.

His was a venerable form going in and out among his people and his friends with

active step. His conversation was of a rare order. The hospitality of his beautiful home, where, with his beloved wife, fitting companion of such a man, he received his friends and most fully disclosed his inner life and self, was something which, when once enjoyed, was not likely to be forgotten by the recipient. Rarely is to be found a finer type of that distinguished, courtly bearing which we associate with generations gone by.

Having completed more than the scriptural span of life, and having, indeed, "redeemed his time," he quietly "fell on sleep" and has been "gathered to his fathers."

"Life's race well run,
Life's work well done,
Now cometh rest."

F. TREUDLY.

Hiram Orcutt

Dr. Hiram Orcutt, one of New England's eminent educators, died at the residence of his son, William Dana Orcutt, in Brookline, Mass., April 17, 1899, in his eighty-fifth year.

Hiram Orcutt was born at Acworth, N. H., February 3, 1815, the youngest son of John Snell and Hannah (Currier) Orcutt. He was the typical ambitious New Hampshire farmer's boy, with slight means and indomitable energy. He worked his way thru the academy and thru the first two years in Dartmouth College by teaching a summer and a winter school in order to study in the spring and autumn. His last two years in college (class of '42) were devoted uninterruptedly to study.

Altho he had been teaching more or less for nine years, he really began his life-work as the head of the New Hebron Academy the year of graduation, and in 1843 became the principal of Thetford Academy, Vermont, where he remained for twelve years, making for himself and the institution an enduring name. From 1855 he was for five years principal of the North Granville (N. Y.) Ladies' Seminary; from 1860 he was for eight years principal of West Brattleboro (Vt.) Ladies' Seminary; and from 1863 he was for eighteen years principal of Tilden Seminary, West Lebanon, N. H. In all more thanl five thousand different students came under his instruction. In his nearly forty years of academy and seminary life, he always occupied some position of public or professional honor, and his counsel was always shaping educational affairs in Vermont and New Hampshire.

At sixty-five years of age he entered upon a new career, as a business-man, by establishing one of the first teachers' bureaus in the world, and for sixteen years he was its active, energetic, and successful manager.

He was the author of several successful books, among which may be mentioned *Class Book of Prose and Poetry*, 1847; *The Teacher's Manual*, 1871; *Home and School Training*, 1874; *School Keeping*, 1885; *Among the Theologies*, 1888; *Personal Recollections*, 1897.

He was twice married; his second wife, Mrs. Ellen Orcutt, a son, and three daughters survive him.

A. E. WINSHIP.

George L. Osborne

George L. Osborne was born in Fayette county, Pa., December 18, 1834, and died in Kansas City, Mo., November 17, 1899.

His father, Abraham Osborne, was of Scotch-Irish descent, and his mother, Jane Gregory, of English descent. George L. was the youngest of six sons, all of whom were reared on a farm. He received his early education in the common schools of his native

county, and at the age of nineteen became a teacher in the public schools. With the money earned he was enabled to enter Waynesburg College, where he remained for a considerable time, being obliged to stop and teach to defray expenses. However, before completing his college course he enlisted in Company C, Fifty-eighth Pennsylvania Volunteer Infantry, but was soon mustered out, when he resumed teaching. Waynesburg College conferred the degree of A.M. on him as a recognition of his work as a student and teacher. He rose rapidly from a country-school teacher to a superintendent, first of Uniontown, and later of Bridgeport and Brownsville. While at Brownsville he was elected professor of mathematics in what is now the State Normal School at California, Pa.

On November 27, 1861, he married Sarah V. Swisher, of Uniontown, Pa., who died a few years ago. From this union two daughters were born, who are still living.

In 1867 he organized the public schools at Macon, Mo., where he remained till 1872, when he was elected superintendent of the schools at Louisiana, Mo., and continued there three years. He was then unanimously chosen president of the Second Missouri State Normal School, at Warrensburg, Mo., in 1875, which position he held uninterruptedly until his death.

A little over thirty years ago the writer first met George L. Osborne in Kansas City, at a session of the Missouri State Teachers' Association. His appearance made a deep impression on me. So striking was he in his bodily movements, speech, deliberation, physical features, that, had I not known otherwise, I would have said: "A full brother to Abraham Lincoln!" The subject of his paper was the qualifications of teachers, and in his own dry, humorous, incisive manner he related some of the experiences that had occurred in Macon county, where he then resided. The presiding officer laughed till his eyes filled with tears, and the audience went wild; but Mr. Osborne read on unmoved, apparently unconscious of the mirth he had created — a course which was pre-eminently characteristic of the man.

Notwithstanding the flashes of wit which he occasionally indulged in — always seasonable, always considerate — he was a serious man. The great questions which come to all in the calmer moods laid deep hold of his mind. Every one he turned over and pondered upon time and again, and his faith in the consolation of the Christian religion was deep, abiding, and steadfast to the end. In times of trial the motto adopted by Luther would apply to him exactly: "Hier stehe ich, ich kann nicht anders; Gott helfe mir!" He was guided as fully and completely as Nelson by the words *right* and *duty*. His mind was richly endowed naturally, and he had improved it by study and reflection till it was one of the richest I ever knew. Alert and analytic, he separated the true from the false intuitively.

The simplicity and the gentleness of his nature endeared him to all with whom he came in contact. Under any light in which his life is viewed, simplicity, straightforwardness, and honesty were as manifest as the clearest sunlight, and all his actions were inspired by the soundest principles of justice and morality.

From the day he came to Warrensburg he put his whole energy into the school, and in it he wore his life away. He lived and died for this creation of his brain. Even in the very presence of death, when I last visited him, our conversation was concerning the school and its prospects. As I held his hand in mine, looking into my eyes as if to read my innermost thoughts, he said: "I have always tried to do my best." Greater heroism in the presence of death I have never seen. His whole life was summed up in this one short sentence.

He cast great thoughts abroad all over the state, and they found a congenial soil which will retain them till time is no more. Missourians revere the name of Dr. George L. Osborne for his honor, his integrity, his truthfulness, his high and controlling sense of duty — his genuine nobility of character.

He combined in a high degree tact, superior skill, and judgment in organizing, classifying, and controlling large bodies of students. His manner was mild, firm, and

decided. Under whatever aspect his character is contemplated, it shines with equal radiance. Above all, he was an honest man — straightforward, simple, direct, strong, versatile, resourceful, and profound. He was one of the most quiet men in the educational work of America. His mind was cast in a large and liberal mold. He grasped facts and principles quickly and turned them in his own way to the solution of the practical affairs of life. There was nothing small, narrow, or fanatical in his character, but a harmonious blending of all those traits which constitute the chief glory of manhood.

Thus passed away a noble, generous man, who was ever frank, helpful, and sympathetic. He who was with us *is not dead.* He lives in the hearts of a grateful and generous people, and the monument which he erected in the affections of those whom he knew and loved so well is more enduring than any inscription carved on marble or tablet of brass.

J. M. GREENWOOD.

Silas Saddler Packard

Mr. Silas Saddler Packard, the founder, and for many years the president, of Packard's Business College, died October 26, 1889. He was an educator in the truest sense of the word, and there have been few more widely and more favorably known in general, and probably none superior to him in his own branch of educational work.

Mr. Packard was born in Cummington, Mass., April 28, 1826, making his age at the time of his death seventy-two years. Altho a New Englander by birth, his early life was spent in Ohio, where his father's family moved in 1833. At that time it was a month's journey from New England to what was then the far West. Mr. Packard's early days were spent in a log cabin. He was an earnest student, altho his education, so far as school was concerned, was only rudimentary. Along the line of grammar and mathematics he possessed unusual talents. He had also the reputation of being the finest penman in school.

At sixteen he began teaching penmanship, and in 1848 he became teacher in the Bartlett Commercial College. Three years later he was appointed teacher of writing, bookkeeping, and drawing in the Union School at Lockport, N. Y. In 1856 he helped Bryant & Stratton to establish a business college in Buffalo, and two years later in company with them established the Bryant & Stratton Business College in New York city.

This institution was the first tenant of the Cooper Union Building, where it remained for several years. Mr. Packard finally bought the interest of his partners, and the school took his name. It was later moved to its present finely appointed building, Fourth avenue and Twenty-third street, New York; and there it has been blessed with great prosperity.

Much of Mr. Packard's life was devoted to the writing of text-books for use in business colleges. He was author of the Bryant & Stratton series of works on bookkeeping published in 1859. He also wrote the *Manual*, the *Arithmetic*, the *Method of Bookkeeping*, and *Bank Bookkeeping and Business Practice* which bear his name.

Mr. Packard's methods were so successful and his name became so widely known that the business schools of Paris and Rouen were founded upon his system, after a careful personal examination on the part of those having the matter in charge. Packard's Business College has graduated more than 15,000 students, about two-thirds of them from New York city.

About two years before his death, Mr. Packard's friends celebrated the seventieth anniversary of his birth, at a complimentary banquet given at Delmonico's. He was presented at that time with a beautiful loving cup as a testimonial of the affection of his friends, the presentation being made by Mayor Strong.

Among Mr. Packard's characteristics may be mentioned a strong personality. He was a man who made many friends and kept them all. As a writer he had a capacity for clearness of thought and felicity of expression that rendered his literary efforts delightful

reading. His unusual talent for organization was one of the main forces of his success. His life in general has been an inspiration to all friends of business education.

O. H. L.

Mrs. Frank Stuart Parker

On April 1, 1899, Mrs. Frank Stuart Parker, wife of Colonel Francis W. Parker, passed from this life quietly and beautifully, from the home at Englewood, Ill., that she graced and blessed for sixteen years.

Few women have been privileged to be of so much service to the cause of education, directly and indirectly, as was Mrs. Parker. Her own tastes and talents, her personal opportunities and those that came to her as the wife of an educational leader whose position and characteristics made him the hero of a large class of teachers and young people thruout the United States, all conspired to a life of great usefulness. She was as widely known, probably, as any woman in educational circles has ever been. She was greatly admired for what she was, and she added materially to the efficiency of her husband in all his public and professional life. But, above all, she was eminently lovable and admirable as a wife and mother. No home could ask more than she gave, despite her public service.

M. Frank Stuart was born in Charlestown, Mass., April 19, 1848; was educated in the public schools of Boston; graduated from the Boston School of Oratory under Lewis B. Munroe, and entered upon her professional career as a teacher in that institution. She was one of the first to make the Martha's Vineyard Summer Institute eminently successful. It was in this work that she and Colonel Parker came to appreciate and enjoy each other; and when he was elected principal of Cook County Normal School, she advised his going and went with him as his bride.

For several years she had charge of the departments of physical culture and elocution in the normal school, and was before the public so far as her school and home duties would permit.

"Correct dress" was her chief theme, altho her voice was heard in many questions that concern woman.

Her husband and two accomplished daughters survive her — Mrs. Mabel Rolfe, of Cambridge, and Mrs. Edna Shepard, of Brookline. During her protracted illness one or the other of these daughters was always by her side.

In her sickness she was peculiarly and beautifully comforting to her loved ones. She made no draft upon their sympathies, but rather inspired them with faith and hope to the last.

A. E. WINSHIP.

John K. Rassweiler

Mr. Rassweiler became a member of the National Educational Association in 1897. He was born in Millersburg, Pa., September 10, 1852, and died at his home in Downer's Grove, Ill., September 18, 1897. He graduated from Northwestern College, at Naperville, Ill., in 1876. Previous to his graduation he had taught in the country schools; and, after graduating, he was principal of Downer's Grove schools for eight years. He was elected superintendent of the schools of Du Page county, Ill., but ill health compelled him to resign after two years' service. In 1884 he became principal of the schools in Wheaton, in the same county, where he remained eight years. He then returned to Downer's Grove and took charge of the schools of that city for the second time. Here he labored till his death.

E. C. H.

Andrew Jackson Rickoff

Andrew Jackson Rickoff was born in New Hope, N. J., August 23, 1824, and died at Berkeley, Cal., at the house of his daughter, March 29, 1899. He obtained his early education in the public schools of Cincinnati, O., to which city his parents had moved in 1830. Later he attended and graduated from the University of Ohio, from which institution he received, in later life, the honorary degree of LL.D. He began his life-work as a teacher at the age of seventeen in the rural schools of Ohio. He served for some time as a school principal in Cincinnati and later became superintendent of schools of that city. His most notable educational service was as superintendent of schools of Cleveland, O., from 1867 to 1882. Subsequently he served for several years as superintendent of schools at Yonkers, N. Y. He was regarded as one of the best school superintendents in the country, and has often been called the father of the graded-school system. He became a member of the National Educational Association in 1871, a member of the Council of Education in 1880, and a life director in 1881.

At the Los Angeles meeting of the National Council, in July, 1899, Superintendent Aaron Gove, of Denver, Colo., spoke of Dr. Rickoff as follows:

"I have been asked, without time for preparation, to say something of the life and character of the late Andrew J. Rickoff. The request comes from one who was his very dear friend, and who hesitates to undertake the task on account of a fear of expressing undue admiration. I accept the task as an honor — whatever inability may accompany it — because in all my life, and in all my study and observation of the schools and school superintendents of the country, no one character stands out more prominently in my mind than that of Andrew J. Rickoff. It is especially appropriate that his name be honored by this Council, because he was a charter member of this organization, and was never absent from a single meeting nor a single session, from the time of its organization to the time of his physical disability which prevented his regular appearance.

"One may say, without reflection upon other cities, that the schools of Cleveland during his superintendency of fifteen years — from 1867 to 1882 — occupied a pre-eminent position in our educational history. It is not easy today to appreciate the educational situation during that time. Few school systems had acquired a name for excellent administration. Dr. Philbrick was in Boston, and in a few cities of the middle country intelligent and excellent efforts were making; but we learned at that time, many of us, to look to Cleveland for counsel and advice. Personally he was to me one of a few cherished advisers, like Dr. Hager and Dr. Philbrick, of Massachusetts, and the other dear friends from the western states who have already passed away. The private correspondence embodying the advice which I, as a city superintendent, received from Mr. Rickoff and others would make an interesting volume, of as much use to the present young superintendent as it was to me in those years. You and I, ladies and gentlemen of the Council, can understand the value of that sort of advice which one receives in his early career from those who have previously traversed the ground. The obstacles which we meet and undertake to overcome are not new to our elder brothers. A few words from them assist in the contest and in the victory. These are intimations of the relations which I held with Superintendent Rickoff. In visiting the Cleveland schools and studying his methods and his work, I remember how overwhelming was my admiration for the painstaking and careful study which he had daily given to the manipulation of the great educational machine of that city.

"His work was scarcely accomplished when, in the unthankfulness of that community, he received the intimation that his services were no longer needed. When, in 1882, Andrew J. Rickoff left the Cleveland schools, he laid down the task of a life that has never been excelled in efficient execution in the history of the schools of our country. Personally I learned to love him as dearly as one man can love another. I remember him as one of my models of knowledge, skill, and power in the administration of a city-school system.

Some of us know what it means to spend an entire lifetime in undertaking to realize the ambition of erecting a school system that shall live and be helpful to the community after our services are discharged. The present generation of schoolmasters cannot be too intimate with his work. He left Cleveland for literary work in New York. When later good health left him, he lived an exceedingly quiet life; but he never forgot us or our meetings; and whenever his physical condition permitted, he was found present at roll-call. I saw him at the meeting of the Department of Superintendence in Cleveland in 1895, feeble and worn with disease, but with a heart and countenance full of love for those whom he met, and of zeal and courage for educational progress."

Wilbur Vernon Rood

Mr. Rood was born July 28, 1848, at Elyria, O. When he was yet a child, the family moved to North Amherst, O. In the fall of 1867 he entered Oberlin College, from which he was graduated in 1873. For three years after graduation he filled acceptably the position of principal of schools at Granville, Ill. During the next four years he had charge of Parker Academy, at Woodbury, Conn. In 1880 he was elected principal of the high school in Akron, O. This position he held till the time of his death, which occurred June 21, 1898. He was twice married. His second wife and six children survive him.

Mr. Rood was a true man and a good teacher. The most important work of his life was done in Akron. During all the eighteen years of his principalship the Akron high school was very prosperous. More than a thousand pupils were graduated in that period. To these and other pupils and teachers his life and work are a precious memory. He became an active member of the National Educational Association in 1896.

Edward Searing

The subject of this sketch was born July 14, 1835, in the village of Aurora, on the eastern shore of Cayuga Lake, N. Y. His father was at first a mechanic and then a farmer. The thirst of the son for knowledge was early manifested in his careful reading of works of history and literature, and in his diligent application to the branches pursued in a country district school. Here his proficiency in the latter became so marked that, at the age of sixteen, he taught successfully a public school in the town of Locke, near Moravia, south of Owasco Lake, about twenty miles to the west of his home.

Then he entered, almost unaided, upon a protracted struggle to obtain a higher education. He was soon admitted to Homer Academy, in Cortland county, where he remained two years; and afterward he was, for eighteen months, a student and an instructor in Cazenovia Seminary, in Madison county. Both these institutions were, at the time, among the most efficient of their kind in his native state. His attendance upon them was occasionally interrupted by his efforts at teaching to earn money so that he could continue his studies. For a year following the summer of 1856 he was employed as the principal of the schools in Bay City, at the southern end of Saginaw Bay, Mich. He next conducted, until 1859, an excellent select school in the town of Union, Rock county, Wis. During the subsequent two years he completed the classical course in the University of Michigan. Then he resumed his teaching at Union, leaving the position in the fall of 1863, when he was engaged as professor of the Latin and French languages in Milton College, Wisconsin.

Here he acquired reputation as a superior scholar, an admirable instructor, and a polished writer. His alma mater conferred upon him, in course, the degree of master of

arts. He delivered a widely known address on the character and services of President Lincoln, immediately after the assassination. He also wrote standard articles on the value of a classical education. He prepared his admirable edition of the first six books of Virgil's *Æneid*, which was published in 1869 in New York city. He nearly completed a similar work on the first six books of Homer's *Iliad*.

In 1873 he was elected by the Democratic party of Wisconsin to the office of state superintendent of public instruction, and was re-elected two years afterward. In his incumbency he was everywhere received as an impressive public speaker on educational topics; he acted as the secretary of the Normal Board of Regents of the state; he was the principal editor of the *Wisconsin Journal of Education;* he collected the materials from the schools of the state for the Centennial Exposition at Philadelphia in 1876; he secured the passage of the law whereby the public schools of Wisconsin can, at their option, furnish the pupils with free text-books; and he organized the system by which the state provides aid for its public high schools, and directly superintends their operations.

At the close of his office, in January, 1878, he returned to his work in Milton College, prosecuting it until the summer of 1880, making his instruction here to cover nearly thirteen years in all. He was then elected to the presidency of the State Normal School, at Mankato, Minn., and held the office over eighteen years, until his sudden death by heart failure, October 22, 1898, at St. Paul, Minn. The state regents of his school have adopted this testimonial of his labors and character: "As a man, he was always gentle, affable, open, and kind, scorning everything that savored of deception or dissimulation; as a scholar, he was accurate, learned, and replete in his specialties; as a teacher, he was concise, lucid, and apt; and as an executive officer, he was able, energetic, firm, and efficient. His influence over the Mankato Normal School will be felt for many years to come."

W. C. WHITFORD.

James Fenimore Cooper Sickel

James F. C. Sickel was born in Bucks county, Pa., October 10, 1834. He was educated in the public schools of Bucks county and of Philadelphia, and at Plainfield Academy, Carlisle, Pa. He taught ungraded and graded schools in Bucks county and in Montgomery county. In 1861 he was appointed principal of the high school in Milford, Del., and in 1862 he entered upon his career as teacher and educator in the public schools of Philadelphia. Here he soon took rank with those who most earnestly advocated educational progress and reform. He was frequently a member of committees to systematize courses of instruction in drawing as a particular branch of study, and in the general branches of study in elementary schools.

He was for many years associated with teachers' institutes of the city and of the state; he was, on two or three occasions, the representative of Philadelphia in the National Educational Association; he was a member of the Committee on Educational Affairs at the Centennial Exhibition, and was charged with the preparation and the proper display of the Philadelphia educational exhibits at the Columbian Exposition in Chicago.

When the Department of Superintendence of the Philadelphia Schools was organized, under Dr. James MacAlister, in May, 1883, Mr. Sickel was among the first selected for the important post of assistant superintendent. He brought to the discharge of his duties in this position a large and valuable experience as teacher. He was progressive in his views, and possessed tact in the supervision of the work of principals, teachers, and pupils.

He thoughtfully studied the complex problems of school education, and sought the best means of improving the work of teachers, so as to insure that general mental

development and those correct habits on the part of the young that result in upright and intelligent citizens, qualified to discharge the varied duties of social and political life.

By his sympathy, intelligence, and fairness in directing the work of the schools, Mr. Sickel won the esteem and the friendship of teachers and principals; and for faithful and conscientious performance of official duty he secured the high respect of members of the local and the central boards of education. EDGAR A. SINGER.

Wells Hawkes Skinner

Mr. Skinner was born in Virginia, 1855, and died in Omaha, September 21, 1898. He studied at Bethany College, in West Virginia, and also at the University of Nebraska. He came to Nebraska in 1884 and entered upon the work of a school superintendent, in which he continued till his death. He was two years at David City, five years at Crete, and seven years at Nebraska City.

He was one of the most active and enthusiastic workers in the state, in demand as a writer, a public speaker, and especially in teachers' institutes, where he is said to have had no superior. He held several responsible offices, among them those of treasurer and president of the State Teachers' Association, and president of the State Association of Superintendents and Principals. His early death removes one of the most efficient and promising educational men of the state. He became a member of the National Educational Association in 1895. E. C. H.

Ellen G. Weeks

Miss Weeks was born on Martha's Vineyard, June 5, 1845. When three years of age she moved with her parents to Sheboygan, Wis. She received her education in the Sheboygan schools, graduating from the high school in 1867. She was the first graduate of that school.

Immediately after graduating she became assistant to the principal of the high school, and remained as such for seven years. She then went to Massachusetts and taught for one year. Upon her return to Sheboygan she began teaching in the grades of the city schools. She had great love and zeal for her life-work. Her death occurred at Sheboygan, January 24, 1898. She became a member of the National Educational Association in 1897. AGNES J. WEEKS.

DEPARTMENT OF SUPERINTENDENCE

COLUMBUS MEETING

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION. — TUESDAY, FEBRUARY 21, 1899

The Department of Superintendence was called to order at 9:30, in the auditorium of the Commercial Club, by the president, E. H. Mark, of Louisville, Ky.

After music by pupils of the eighth grade of the First Avenue School, Columbus, an invocation was offered by Dr. Washington Gladden.

Dr. James H. Canfield, president of Ohio State University, and Dr. J. A. Shawan, superintendent of schools, Columbus, O., welcomed the convention.

President E. H. Mark responded to the words of welcome on behalf of the department.

E. B. Prettyman, state superintendent of public instruction, Baltimore, Md., read a paper on "Public Lands and Public Education."

Superintendent R. C. Barrett, of Iowa, opened the discussion of Superintendent Prettyman's paper, which was further discussed by Dr. George T. Fairchild, Berea College, Kentucky; Dr. B. A. Hinsdale, University of Michigan; John MacDonald, of Kansas, editor of the *Western School Journal*, and Superintendent H. G. Weimar, of Maryland. Superintendent Prettyman closed the discussion.

Sherman Williams, Glens Falls, N. Y., read a paper on the subject, "Relation of Public Libraries to Public Schools."

The paper was discussed by State Superintendent L. D. Harvey, of Wisconsin; Dr. Arthur Allen, University of Colorado; Superintendent W. C. Martindale, Detroit, Mich.; Supervisor R. C. Metcalf, Boston, Mass.; Superintendent Aaron Gove, District No. 1, Denver, Colo.; Superintendent Eugene Bouton, Pittsfield, Mass.; Principal A. S. Downing, New York city; Superintendent L. E. Wolfe, Kansas City, Kan.; Superintendent Orville T. Bright, Chicago, Ill.; Superintendent George Griffith, Utica, N. Y.

The president appointed the following

COMMITTEE ON RESOLUTIONS

Superintendent H. S. Tarbell, Rhode Island.
Superintendent G. R. Glenn, Georgia.
Ossian H. Lang, New York.
Superintendent E. P. Seaver, Massachusetts.
Superintendent W. C. Martindale, Michigan.
Superintendent F. B. Dyer, Kansas.
Superintendent W. H. Hershman, Indiana.

AFTERNOON SESSION

The afternoon session was devoted to round tables, as follows: round table for state superintendents, conducted by John W. Abercrombie, state superintendent of public instruction, Alabama; and round table of the National Herbart Society.

EVENING SESSION

Supervisor George H. Martin, Boston, Mass., read a paper entitled "The Unseen Forces in Character-Making."

The paper was discussed by Superintendent S. B. Laird, Lansing, Mich.

The next number on the program, "Shall the Sexes and Classes Have the Same Course of Study in the Schools?", was omitted on account of the absence of Superintendent David K. Goss, who had been appointed to present that subject.

Mrs. Alice White Duval entertained the department by reciting from "The Blessed Damosel."

The department then adjourned.

SECOND DAY

MORNING SESSION. — WEDNESDAY, FEBRUARY 22

The department was called to order at 9:30 by President Mark.

Music was furnished by pupils of the Columbus City Normal School.

Prayer was offered by Dr. E. E. White.

Dr. James E. Russell, dean of Teachers' College, Columbia University, N. Y., presented a paper on "The Training of Teachers for Secondary Schools."

The paper was discussed by Joseph H. Stewart, president of North Georgia Agricultural College, and by Mr. Thorndike, of the Cleveland High School.

Hon. Howard J. Rogers, director of education and social economy, United States commission to the Paris exposition, was accorded the floor to explain the plans for "The United States Educational Exhibit at Paris in 1900." He spoke as follows:

Mr. President, Members of the Association:

I come before you this morning thru the courtesy of your president, not having a definite place upon the program, but interpolated, as it were, owing to the present interest in my subject. I assure you that I shall not keep you long from the enjoyment of the regular program, as what I have to say can be stated briefly.

The Paris exposition of 1900 is avowedly to be one of excellence and selection, and the best products of men's thought and labor in science, art, and industry will be on view to the world. Education and instruction are given the place of honor in the French classification, because, in the language of the French commissioner-general, "they are the source of all progress, and thru them man enters into the work of life."

It is a matter of some regret that in their representation the French officials have not made the portals to this entrance a little larger, as they have assigned to the United States only about 4,000 feet to show the working of the mill which grinds out American citizens. But we accept the conditions without complaint, chiefly because we find that we cannot better ourselves if we do complain. We are, at least, treated as generously as any other foreign nation.

The exposition will open April 15, 1900, and continue till November 5 of the same year. The grounds are in the heart of the city of Paris, and include the Champs de Mars, the Esplanade du Trocadero, both banks of the river Seine for almost a mile, and the Esplanade des Invalides. Education and liberal arts have a special building on the west side of the Champs de Mars, and the space for education proper is in the gallery of this building, between the spaces assigned to France and Germany. Special forms of education are provided for elsewhere — as agricultural schools in the agricultural building, art schools in the art building, and, under the present ruling of the exposition authorities, schools for defectives in the social-economy building, altho we hope to bring these schools back to the education group.

Now, gentlemen, I am here today for two purposes: first, your support; second, your advice. To secure the former I must outline the plan of the exhibit. I take it for granted that this assemblage is a unit in recognizing the value of an educational exhibit, its opportunities for comparison, its convenience for investigation. I have appeared of late before assemblages which have seriously questioned the advisability of spending any money in presenting to the world our educational resources. I will not say where, as it might seem to be discourteous to that distinguished body of gentlemen which presides so ably over the destinies of our nation. I will not stop to discuss with you the nature of the material to be exhibited, or the methods of best displaying such material. You are familiar with them, and at most it is a matter of detail to be worked out by the one in charge. There remains, then, to be considered this point — the scientific arrangement of the exhibit as a whole, with a view of presenting to the world most clearly the educational system of our nation.

Of course, we have no national system. We have forty-five sets of systems, with a few territorial annexes thrown in. That is our problem — to show what we have not. But upon analysis the problem is not so much of a paradox as it seems. The French rules compel us to do that which, in our inner consciousness, we know we ought to do, viz., to exhibit as a nation. States, or any part thereof, cannot be recognized. It is a matter of no moment to any foreigner to know that Kentucky has a better or a worse educational system than Virginia; or whether California and Ohio are on an equality or not. We are faced front, shoulder to shoulder, with nations, and as a nation we must present our case and be judged.

Our exhibit will be divided, generally speaking, into the kindergarten, elementary schools, secondary schools, normal and training schools, colleges and universities, and technical schools. Now, while we have not, strictly speaking, a national system in any respect, we have many places in our country where the elementary schools, for example, are doing magnificent work; schools that are setting the standard for the rest of the country, and to which the work of other localities is approximating. We will ask such schools to furnish us an exhibit in that line. There are other sections where secondary-school work has been strongly developed and stands pre-eminent in the country. Those schools will be invited to contribute to that section. Colleges and universities will be selected with reference to their adaptability to bring out certain salient and characteristic features of our higher educational work.

By this means we expect to develop an exhibit in entire harmony with the dominant motive of the exposition; and an exhibit which will be collective, scientifically graded, and distinctly national in character, inasmuch as it will represent the most advanced thought of our country in every department of education, irrespective of section or locality.

Now, I realize fully that it is no small thing to ask a man who is proud, and justly proud, of the school or system under his supervision, to sink his identity and join in a general exhibit from a purely national standpoint. But we do ask it, on the grounds before stated. We believe that, if this presentation of the case does not convince you, upon further deliberation you will recognize the justice and sound logic of the proposition.

Our national pride in the proper presentation of our school interests demands a sacrifice of individual preference and prejudice, as well as the loyal support of every schoolman. We must not repeat the mistake of 1889. I have not the slightest wish to criticise that exhibit or those who prepared it. It is all a matter of history. I know they did not have time enough, and I presume they did not have money enough; but it is better not to be represented at all than to be misrepresented. It is almost painful to read the report of the French commission on the American educational exhibit, and see the painstaking way in which it seeks to find something to praise; and it even goes so far as to mention

things which it knew to exist in our educational system, but for which it could find no presentment in the exhibit.

I think most Americans who visited Paris in 1889 were of the opinion of Chauncey M. Depew. He said that when he started he was firmly of the opinion that any American was the peer of any king or emperor, and a great deal better than most princes and potentates, and that the proper thing to do was to get an American flag, about forty feet square, and wave it over his head as he approached every American exhibit. But after hunting closely for a day or two, with the aid of a guide, for the exhibits, and comparing them with those of other countries, he did not have a bit of trouble in folding up his flag and bringing it home in his vest pocket.

I said, a few moments ago, that I wanted not only your support, but your advice. And I want the latter particularly in the matter of selecting those schools and institutions which are to represent the United States abroad.

I cannot assume the egoism, nor do I care to undergo the criticism, of arbitrarily selecting these schools myself, and I shall rely upon the National Educational Association, thru its constituted committees, to relieve me of this responsibility. I believe this plan will commend itself to you as a fair and a just one, for certainly nowhere else than in the ranks of our association, which contains on its rolls every prominent educator in every part of our country, can competent advice be sought.

In conclusion I wish to say that the headquarters of the department of education, during the organization of the exhibit, will be at Albany, N. Y., and its officers will welcome at all times suggestions, advice, and criticism. We may not always adopt the suggestions, we may not always follow the advice; there may be reasons why we cannot; there may be reasons why we should not. But we shall welcome it none the less. The department of education, under the United States commission, has in view one object in this exposition, and will employ every means to attain it. We believe the American citizen — the composite type, if I may use the phrase — is superior to that of any other nation. We wish to demonstrate this to every foreign nation, and put before them clearly and understandingly the system of education which produces this type. For this reason we feel that we can appeal, not only to your professional pride, but to your patriotism and loyalty. The National Educational Association will be in the highest degree responsible for this outcome, and we expect from its members their good wishes, their good advice, and their good help.

Dr. F. Louis Soldan, superintendent of schools, St. Louis, Mo., spoke on the subject, "Efficient and Inefficient Teachers."

The subject was discussed by A. S. Downing, New York city; John MacDonald, Topeka, Kan.; Superintendent Coleman, Lemars, Ia.; Orville T. Bright, Chicago, Ill.; Albert Salisbury, president of the State Normal School, Whitewater, Wis.; Superintendent R. K. Buehrle, Lancaster, Pa.; Superintendent J. A. Carr, Anderson, Ind.; Superintendent J. F. Keating, Pueblo, Colo.; Dr. Charles A. McMurry, Normal, Ill.; Superintendent Charles W. Deane, Bridgeport, Conn.

The president announced the following

COMMITTEE ON NOMINATIONS

O. T. Corson, Ohio. A. G. Lane, Illinois.
C. G. Pearse, Nebraska. G. H. Conley, Massachusetts.
McHenry Rhoades, Kentucky.

The department then adjourned.

AFTERNOON SESSION

The afternoon was devoted to round tables, as follows: round table of city superintendents, conducted by J. P. Sharkey, superintendent of schools, Van Wert, O.;

Educational Press Association of America, under the leadership of President John MacDonald, Topeka, Kan.

EVENING SESSION

The department was called to order at 8 o'clock by the president.

The following addresses were made:

"What the Superintendent is Not," Dr. A. E. Winship, editor of the *Journal of Education*, Boston, Mass.

"How the Superintendent can Make Good Teachers out of Poor Ones," Dr. W. T. Harris, United States Commissioner of Education, Washington, D. C.

"Authority of the School Superintendent," Dr. E. E. White, Columbus, O.

THIRD DAY

MORNING SESSION. — THURSDAY, FEBRUARY 23

The department was called to order at 9:30 by President Mark.

After music by the pupils of the Columbus City Normal School, Rev. Dr. Hillman, of Columbus, offered prayer.

Dr. Arnold Tompkins, professor of pedagogy, University of Illinois, addressed the department on the subject, "The Implications and Applications of the Principle of Self-Activity in Education."

The subject was discussed by Superintendent L. H. Jones, Cleveland, O.; Superintendent F. Treudly, Youngstown, O.; Professor Samuel Weir, New York University School of Pedagogy; Dr. Arthur Allin, professor of philosophy and pedagogy, University of Colorado; Professor Reuben Post Halleck, Louisville, Ky.; Louis Galbreath, New York city; Dr. E. E. White, Columbus, O.; Dr. J. W. Bashford, president of the Ohio Wesleyan University. Dr. Tompkins closed the discussion.

Superintendent W. L. Steele, Galesburg, Ill., read a paper entitled, "To What Extent should a High-School Pupil be Allowed to Elect His Work?"

Mr. Steele's paper was discussed by Superintendent T. J. Merrill, Cedar Rapids, Ia.; and by Superintendent Coleman, Le Mars, Ia.

The Committee on Nominations presented the following report:

Your committee unanimously recommends the following persons for the offices named for the ensuing year:

For *President* — A. S. Downing, New York.
For *First Vice-President* — G. R. Glenn, Georgia.
For *Second Vice-President* — J. A. Shawan, Ohio.
For *Secretary* — C. M. Jordan, Minnesota.

By order of committee,
O. T. CORSON, *Chairman*.

On motion, the secretary was instructed to cast the ballot of the department for the officers so nominated. This having been done, the persons named were declared elected.

On motion of Mr. Bright, the Executive Committee was instructed to employ a stenographer to report the next meeting.

Hon. W. T. Harris, United States Commissioner of Education, chairman of the Committee on Hygiene and Sanitation appointed at the Chattanooga meeting, read the report of his committee.

The following resolution was presented by Dr. Harris:

Resolved, That the preliminary report of the Committee on Hygiene be referred back to said committee for further consideration and completion, and that the same committee be directed to bring the attention of the National Council of Education to said report, and convey to the president of said Council the request of this department to take up this report, if possible, at the coming meeting at Los Angeles, and consider its recomt mendations; and, if the same meet with approval, to ask the Board of Trustees, in the prescribed form, to set apart the sums required for the specific purposes mentioned.

Superintendent Soldan moved that the report be received and filed, and that the resolution be adopted. Carried.

State Superintendent G. R. Glenn, of Georgia, invited the department to hold its next annual meeting in Atlanta.

Dr. E. B. Andrews, superintendent of schools, Chicago, Ill., invited the department to meet in Chicago.

Mr. Hope, member of the Atlanta city council, spoke in support of Superintendent Glenn's invitation. Superintendent E. B. Prettyman, of Maryland, and President Joseph S. Stewart, of Georgia, also spoke in favor of Atlanta.

Superintendents Soldan and Pearse advocated Chicago as the next place of meeting.

The result of the vote was as follows: Atlanta, 42; Chicago, 52.

President Mark declared Chicago the next place of meeting.

Superintendent Gove, Denver, Colo., offered the following:

Resolved, That a committee of three be appointed, with instructions to report on the first day of the meeting of 1900, recommending a place for the meetings of the department for the two succeeding years, 1901 and 1902.

The resolution was adopted.

The department then adjourned.

AFTERNOON SESSION

The convention was called to order at 2:45 by Second Vice-President A. T. Barrett, Chattanooga, Tenn.

The Committee on Resolutions made its report thru its chairman, Superintendent H. S. Tarbell, Providence, R. I., as follows:

To the Department of Superintendence of the National Educational Association:

The Committee on Resolutions respectfully presents for your consideration the following report:

1. *Resolved*, That the thanks of this department are due, and are hereby tendered, to the officers of the department for the zeal and efficiency with which they have discharged their duties; to those who have presented the valuable papers that have been read, and made the eloquent and suggestive addresses that have been delivered; to the people of Columbus for their generous hospitality, and particularly to the board of trade and the Local Committee, which have contributed so much to the success of this meeting; to the press for its extended and satisfactory reports; and to the railroads for reduced rates of transportation.

2. *Resolved*, That the adequate representation of the schools of the United States at the Paris exposition of 1900 is of great importance, and that the efforts being made to secure such representation deserve our cordial co-operation.

3. *Resolved*, That the Directors of the National Educational Association be requested to provide an adequate appropriation for the meetings of this department, and that the officers of this department be directed to present this request at the next meeting of the board.

4. *Resolved*, That we are greatly gratified by the growing recognition and appreciation of the teaching profession, and especially by the growing tendency of school committees and the public to regard the competent superintendent as an educational expert, whose matured opinions on questions of educational principles and processes are deserving the recognition accorded to the judgment of experts in other professions.

5. *Resolved*, That the tendency, widely shown, so to reconstruct the organic law governing the election and powers of boards of education as to diminish to the lowest possible point the opportunity of their members to use their office for their personal interests, is an indication of how abhorrent to the feelings of the better portion of every community is

any attempt to use the public schools for any purpose less worthy than training the rising generation to honorable citizenship and efficient industrial life.

6. *Resolved*, That the increasing co-operation of the home and the schools, and the library and the schools, the establishment of vacation schools, the greater extension in recent years of educational advantages to those not regularly enrolled in the schools, the increasing attention to the artistic decoration of the schoolrooms and to the hygienic conditions of the schools, the growing interest in educational reforms exhibited by the magazines and the daily press, are all evidences of educational progress, on which we may sincerely congratulate ourselves.

7. *Resolved*, That the growth of the attendance at the meetings of this department and the interest of others than superintendents in our meetings show how attractive a center of educational life we have become. We welcome most cordially our visiting friends; but feel alarmed lest numbers shall so react upon ourselves as to lead us in our papers, our addresses, and our debates to lose sight of the professional and technical side of our work. The time has come when we can properly insist that those who speak to us shall recognize the professional character of an audience of superintendents, and shall appeal to our deepest thought and closest attention.

8. *Resolved*, That we recommend the appointment of an advisory committee on program, whose duty it shall be to assist the president in the selection of topics to be presented at these meetings, and in such careful formulation of questions for discussions as shall lead to most definite and fruitful debate. This committee should be practically continuous; its members should be three in number, each holding office for three years, and one member retiring each year. We recommend that for the present year this committee be appointed by the retiring president, one member for one year, one for two years, and one for three years; and that hereafter the place of the retiring member be filled by the Committee on Nominations.

HORACE S. TARBELL, Rhode Island.
OSSIAN H. LANG, New York.
FRANK R. DYER, Kansas.
W. H. HERSHMAN, Indiana.
W. C. MARTINDALE, Michigan.

The report was received and adopted.

Samuel Hamilton, superintendent of schools, Allegheny county, Pa., read a paper on "The Director as a Factor in Education."

Superintendent C. G. Pearse, chairman of the Committee on Uniform Financial Reports, appointed at the Chattanooga meeting, presented the report of that committee.

After an animated discussion, in which Superintendents Griffith, Emerson, Bouton, and others participated, Mr. Pearse offered the following:

Resolved, That this form of report, presented by the committee, be approved by the department, and that the directors of the National Educational Association be asked to authorize the Secretary of the National Educational Association to have printed a sufficient number of the forms recommended so that a copy of the form may be sent to the superintendent of schools in each city or village in the various states; as well as to all state superintendents of public instruction, explaining to them the indorsement of this department, and the desire that a report upon the form proposed be embodied in all their formal published school financial reports.

Mr. Pearse's resolution was adopted.

Moved by William J. Cox, superintendent of schools, Moline, Ill.,

That a committee of three be appointed by the President of this association to confer with the state departments and the United States Commissioner of Education with a view to securing the adoption of this form of statistical report by all to whom school superintendents are expected to report.

Superintendent Cox' motion prevailed.

The Committee on Amended Spelling made its report thru its chairman, R. K. Buehrle, superintendent of schools, Lancaster, Pa.

Superintendent O. T. Bright moved that the report be received.

After listening to objections by Mr. John MacDonald and Dr. E. E. White, and to further argument by Mr. Buehrle, the department passed affirmatively upon Mr. Bright's motion.

President Mark announced the following committees:

COMMITTEE ON PERMANENT LOCATION

Aaron Gove, Colorado. George H. Martin, Massachusetts.
O. T. Corson, Ohio.

CONFERENCE COMMITTEE ON FINANCIAL REPORTS

Hon. William T. Harris. Superintendent John W. Abercrombie, Alabama.
Superintendent N. C. Schaeffer, Pennsylvania.

ADVISORY COMMITTEE ON PROGRAM

Superintendent L. H. Jones, one year. Superintendent H. S. Tarbell, two years.
Superintendent L. D. Harvey, three years.

The department then adjourned.

EVENING SESSION

The department was called to order at 8 o'clock by President Mark, in the auditorium of the Ohio State University.

Dr. T. C. Mendenhall, president of Worcester Polytechnic Institute, Worcester, Mass., addressed the department upon the subject, "Some Neglected Factors and Forgotten Facts."

Following this address, President Mark introduced President-elect Augustus S. Downing, and presented him with the official gavel of the department, welcoming him to the responsibility of the office to which he had been elected. President Downing responded in a graceful speech, thanking the members of the department for the honor conferred and inviting their co-operation.

The department thereupon adjourned *sine die*.

The members then repaired to the armory of the University of Ohio, where, under the leadership of President and Mrs. Canfield, a reception was tendered to them by the faculty of the university, the teachers of the city schools, and the citizens of Columbus.

J. H. VAN SICKLE,
Secretary.

PAPERS AND DISCUSSIONS

THE PUBLIC LANDS AND PUBLIC EDUCATION

BY E. B. PRETTYMAN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, MARYLAND

In order to realize the relation of the public lands of the United States to public education, it may be well to review briefly some of the legislation and history of our country.

CLAIMS OF SIX STATES TO OWNERSHIP OF THE WESTERN LANDS

When, in the year 1777, the Continental Congress had framed the "Articles of Confederation," and submitted them to the several states for ratification, six of the thirteen states claimed the ownership of the immense tracts of unsettled country extending from the Alleghanies to the Mississippi. Massachusetts claimed a strip of land equal in width to the width, north and south, of the state, based upon the charter of the colony, granted by William and Mary in 1691, which described the lands granted thereby as extending "from the Atlantick or Western Sea and Ocean on the East, to the South Sea on the West parte." (Which and where was "the South Sea" the charter does not state.)

The claim of Connecticut was based on its charter from Charles II., in 1662, which describes the territory granted as extending "from the Narragansett Bay on the East, to the South Sea on the West" (the same "South Sea.")

New York claimed all the lands between Lake Erie and the Cumberland mountains — in other words, what is now the state of Ohio and a portion of Kentucky — by virtue of various treaties with the Six Nations and their allies.

Virginia claimed the entire region occupied by Kentucky and all the lands north of the Ohio river. Her claim was based partly upon the original charter granted by James I. to South Virginia, in 1609, which makes the seacoast two hundred miles to the northward from Cape or Point Comfort, and two hundred miles to the southward from the said Point or Cape Comfort, the eastern boundary of the territory granted; "and all that space and circuit of land lying from the sea coast of the precinct aforesaid, up into the land throughout, from Sea to Sea, West and North-west." If it was intended that the west line was to begin at

the southern end of the coast line, and the northwest line from the northern end of said coast line, then Virginia would have included nearly all of the entire Northwest.

Dr. Herbert B. Adams, in his extremely valuable paper upon the "History of the Accession of Public Lands," remarks that

> It is not very surprising that the ideas and language of the privy council should have been somewhat hazy as to the exact whereabouts of the "South Sea," for Stith, one of the early historians of Virginia, tells us that in 1608 . . . . an expedition was organized under Captain Newport to sail up the James river and find a passage to the South Sea. Captain John Smith also was once commissioned to seek a new route to China by ascending the Chicahominy!

A much stronger claim on the part of Virginia to the ownership of the great Northwest, however, arose from actual conquest and possession. By act of the British Parliament, in 1774, the crown lands northwest of the Ohio river were annexed to the royal province of Quebec — which was one of the acts complained of in the Declaration of Independence. In 1778 a secret expedition was undertaken by Virginia, at her own expense, under Colonel George Rogers Clarke, who was commissioned by Patrick Henry, then governor of Virginia; the result of which was the complete conquest of the northwestern lands; whereupon Virginia proceeded to annex the conquered territory under the name of the "county of Illinois."

These several claims conflicted, as the lands thus claimed overlapped, and it is probable that, had there been no cession to the general government, disputes, and possibly serious collisions, between the claimants would have occurred.

The Carolinas and Georgia were also encouraged by the existing state of affairs to advance their rights of eminent domain over all the territory now included in the state of Tennessee and portions of Alabama and Mississippi.

MARYLAND TO THE RESCUE

In this condition of affairs the state of Maryland, ably represented in the Continental Congress, and with a state legislature composed of able and cultivated citizens, came to the front, and took high and strong grounds against the claims of all and each of the states that asserted titles to the lands between the Alleghanies and the Mississippi.

The first move that was ever made in Congress toward the assertion of national sovereignty over this western country was made by Maryland. On October 13, 1777, it was moved by a delegate from Maryland "that the United States in Congress assembled shall have the sole and exclusive right and power to ascertain and fix the western boundary of such states as lay claim to the Mississippi or South Sea as a western boundary, and [to] lay out the land beyond the boundary so ascertained

into separate and independent states, from time to time, as the numbers and circumstances of the people may require."[1]

Maryland alone voted in the affirmative.

The original proposition that Congress should exercise sovereign power over the western country was a pioneer idea, and Dr. Herbert B. Adams tells us: "We have discovered, by a careful examination of the journals of the Continental Congress, that Maryland was not only the first, but for a long time the only, state to advocate national jurisdiction over the western lands."

Rhode Island, New Jersey, and Delaware joined in seeking, either a share in the proceeds of the sale of these lands, or that funds arising from such sales should be applied toward defraying the expenses of the war; but they were content that the jurisdiction over the western lands should remain in the states that claimed them.

The credit of suggesting and successfully urging in Congress that policy which has made this country a great national commonwealth, composed of "free, convenient, and independent governments," bound together by ties of permanent territorial interest, the credit of originating this policy belongs to Maryland, and to her alone. (Dr. Herbert Adams.)

The claiming states stubbornly urged their right to jurisdiction and to actual ownership. Every state but Maryland virtually conceded these claims by ratifying the Articles of Confederation, Delaware being last, ratifying February 22, 1779. Maryland was thus left to fight out the battle alone.

The Articles of Confederation could not go into effect until ratified by every state, and Maryland still refused absolutely to ratify until the western lands should be ceded to the general government. For two years longer she maintained her position unflinchingly.

December 15, 1778, the Maryland general assembly adopted the celebrated and exceedingly important document known as "The Maryland Instructions to her Delegates in Congress," wherein, after arguing against the claimants' contention, it is asserted that

We are convinced that policy and justice require that a country unsettled at the commencement of this war, claimed by the British crown, and ceded to it by the Treaty of Paris, if wrested from the common enemy by the blood and treasure of the thirteen states, should be considered as a common property, subject to be parceled out by Congress into free, convenient, and independent governments, in such manner, and at such times, as the wisdom of that assembly shall hereafter direct. We have coolly and dispassionately considered the subject; we have weighed probable inconveniences and hardships against the sacrifice of just and essential rights; and we do instruct you [the delegates of Maryland in the Continental Congress] *not* to agree to the confederation, unless an article or articles be added thereto in conformity with our declaration; should we succeed in obtaining such article or articles, then you are hereby fully empowered to accede to the confederation.

[1] *Journal of Congress*, Vol. II, p. 290.

In May, 1779, the Virginia legislature passed an act establishing a land office, and offered to sell the western lands which she claimed at £40 per hundred acres.

During the same month the "Maryland Instructions" were read in Congress and referred to a committee.

October 30, 1779, Mr. William Paca, of Maryland, offered the following resolution, which was seconded by his colleague, Mr. George Plater:

WHEREAS, The appropriation of vacant lands by the several states during the continuance of the war will, in the opinion of Congress, be attended with great mischiefs; therefore,

Resolved, That it be earnestly recommended to the state of Virginia to reconsider their late act of assembly for opening their land office; and that it be recommended to said state, and all other states similarly circumstanced, to forbear settling or issuing warrants for unappropriated lands, or granting the same during the continuance of the present war.

The influence of Maryland had by this time become so potent that the above-quoted preamble and resolution were adopted, only Virginia and North Carolina voting in the negative, the New York delegation being divided.

Next in order of time came the famous "Remonstrance," addressed "by the general assembly of Virginia to the delegates of the United States of America in Congress assembled," dated December 14, 1779. Therein Virginia remonstrates against the idea of Congress exercising jurisdiction, or any right of adjudication, concerning the petitions of the Vandalia or Indiana land companies, or upon "any other matter" subversive of the internal policy of Virginia. But in this remonstrance Virginia declares herself "ready to listen to any just and reasonable propositions for removing the ostensible causes of delay to the complete ratification of the confederation." As Maryland was now the only state which had not ratified the Articles of Confederation, it is manifest that her influence was, at last, beginning to tell even upon Virginia, and that the land claims of the latter were becoming less positive.

Then followed an act of the New York legislature, which was passed February 19, 1780, entitled, "An Act to facilitate the completion of the Articles of Confederation and perpetual union among the United States of America." In this act New York authorized her delegates in Congress to make either an unreserved or a limited cession of her western lands, according as these delegates should deem it expedient. This act was read in Congress March 7, 1780.

On September 6, 1780—a memorable day in the history of the land question—a report of the committee was made in Congress on the "Maryland Instructions," the "Virginia Remonstrance," and the "Act of the New York Legislature of February 19, 1780."

This report earnestly recommended the claiming states "to pass such laws and give their delegates in Congress such powers as may effectually

remove the only obstacle to a final ratification of the Articles of Confederation; and that the legislature of Maryland be earnestly requested to authorize their delegates in Congress to subscribe the said articles." These recommendations were sent to all the states.

Connecticut soon offered a cession of western lands, provided that she might retain the jurisdiction.

January 2, 1781, Virginia offered to cede to the confederation complete jurisdiction over all lands northwest of the Ohio, on certain conditions. March 1, 1781, the offer of New York to cede all the western land claimed by her was formally made in Congress.

In this condition of affairs, Maryland, having virtually succeeded in the establishment of the principles for which she had contended, ratified the articles on the first day of March, 1781; and the first legal union of the United States was complete.

The offer of New York was accepted, on motion of Mr. Daniel Carroll, of Maryland, October 29, 1782. Virginia modified her conditions, as requested, and on October 20, 1783, empowered her delegates in Congress to make the cession, which was done by Thomas Jefferson and others March 1, 1784. Massachusetts ceded her western lands, together with jurisdiction over the same, April 19, 1785. Connecticut ceded the lands she had claimed September 14, 1786, reserving, however, all the lands she had claimed lying between the western boundary line of Pennsylvania and a north-and-south line drawn 120 miles west of said boundary line, known thereafter as the "Connecticut Reserve," a tract nearly as large as the present state of Connecticut. The acceptance of this cession was strongly opposed in Congress. After a severe struggle it was accepted May 26, 1786, Maryland voting in the negative. Connecticut granted 500,000 acres of this reserve to certain of her citizens whose property had been burned or destroyed during the Revolution. The remainder was sold, under an act of the Connecticut legislature, in 1795, for $1,200,000, which sum has been used for the benefit of the schools and colleges of Connecticut. South Carolina ceded her western land claims in 1787, North Carolina in 1790, and Georgia in 1802.

GRANTS OF PUBLIC LANDS MADE BY CONGRESS OF THE UNITED STATES, FOR PUBLIC EDUCATION, TO THE TRANS-ALLEGHANY STATES

An ordinance adopted by Congress May 20, 1785, provides for the division of the public lands into townships of six miles square, and for the subdivision of each township into thirty-six sections, each containing one square mile, and numbered from 1 to 36; and then provides that "there shall be reserved the Lot No. 16 of every township for the maintenance of public schools within said township." This left open the question whether the public schools that the United States had endowed should be under national or state control. By an act approved March 3,

1803, Congress disposed of this open question by vesting in the legislature all lands granted to Ohio for the use of schools "in trust for the use aforesaid, and for no other use, intent, or purpose whatever."

In the enabling acts passed by Congress, as each state west of the Alleghanies was admitted into the union, substantially the same provision was engrafted, until the state of California was admitted. Congress donated for the maintenance of public schools to California, and to each state admitted subsequently up to the present time, two sections, No. 16 and No. 36, in each township. The public lands so granted by the United States for public schools to the several states, beginning with Ohio, are equivalent, therefore, to one-thirty-sixth part of the whole area of each state, until the admission of California; and in the case of California and each state subsequently admitted are equivalent to one-eighteenth part of the whole area of each state, and amount in the aggregate to 67,893,919 acres.

Besides, vast quantities of public land have been granted to the trans-Alleghany states for state universities, and for other educational institutions.

By way of example, the enabling act for the state of South Dakota and three other states, passed by Congress and approved February 22, 1889, grants public lands to the state of South Dakota, as follows: for the school of mines, 40,000 acres; for the reform school, 40,000 acres; for the agricultural college, 40,000 acres; for the university, 40,000; for the state normal school, 80,000 acres; for public buildings at the capital of said state, 50,000 acres; and for such other educational and charitable purposes as the legislature of said state may determine, 170,000 acres — in all, nearly 500,000 acres.

Sec. 11 of same act provides that "all lands herein granted for educational purposes shall be disposed of only at public sale, and at a price not less than ten dollars per acre." (The value of the grants aggregating nearly $5,000,000, besides the lands for common schools.)

Why should not an equitable share of the public lands of the United States be granted by Congress to the states east of the Alleghanies, and especially to Maryland, whose wise statesmanship (as has been demonstrated) "laid the keystone of the confederation, and of the American union"?

Only one vigorous attempt has been made, until very recently, so far as we can ascertain, to change the national educational policy in connection with the public lands.

The general assembly of Maryland in 1821 adopted an elaborate report, submitted by the committee to which so much of the governor's annual message as related to education and public instruction had been referred, that concluded with the following resolutions:

Resolved, by the general assembly of Maryland, That each of the United States has an equal right to participate in the benefit of the public lands — the common property of the union.

Resolved, That the states in whose favor Congress has not made appropriations of land for the purposes of education are entitled to such appropriations as will correspond, in a just proportion, with those heretofore made in favor of the other states.

Resolved, That his excellency, the governor, be requested to transmit copies of the foregoing report and resolutions to each of our senators and representatives in Congress, with a request that they will lay the same before their respective houses, and use their endeavors to procure the passage of an act to carry into effect the just principle therein set forth.

Resolved, That his excellency, the governor, be also requested to transmit copies of the said report and resolutions to the governors of the several states of the union, with a request that they will communicate the same to the legislatures thereof, respectively, and solicit their co-operation.

The legislatures of New Hampshire and Vermont indorsed this report; but this appears to have been the end of the matter, as Congress did not act thereupon.

There are signs, however, at the present time, of a general movement thruout the country in favor of the principles which Maryland has advocated in the past.

At the annual meeting of the National Educational Association held at Buffalo, N. Y., in July, 1896, Judge Draper, president of the University of Illinois, in a very able paper, asserted that

> The federal government has much land yet to give away, and it should be sacredly devoted to the cause of education of the masses. The intervention of the government would help the weak and thus equalize conditions, systematize a national educational policy, promote national unity, and advance our position in the estimation of the thoughtful people of the world.

The states west of the Alleghanies that have received only one section of land for every township for public schools are very properly moving to obtain an equivalent for the other section received by the states admitted later, beginning with California. As the result of this general movement, three bills were introduced at the last session of Congress providing for the equitable adjustment of the claims of all the states to the proceeds of the public lands for public education.

Maryland has never received from Congress a grant of a single acre of public lands for the benefit of her public schools.

In this condition of affairs, the state board of education of Maryland, at the unanimous request of the State Association of Public School Officers, has appointed a committee, with Governor Lloyd Lowndes as chairman, to present the claim of the state to Congress for an equitable share of the public lands of the United States to aid in the maintenance of the public schools of the state.

There are other states which have received none of the public lands for public schools, and still other states that have received only one section in every township.

It is to be hoped that the members of this department will all use their influence, actively and aggressively, to bring about, thru the action

of Congress, a just and fair equalization of the distribution of the public lands still owned by the United States — the common property of all the citizens of the union — for the support of public schools.

The mother states appeal to the great commonwealths that have outgrown them to join in this measure of justice.

After such equalization, or contemporaneously therewith, we are ready to join our brethren of all the states in favor of the proposition of Judge Draper, that the 600,000,000 acres of public lands still undisposed of by the federal government "shall be sacredly devoted to the cause of education of the masses" — the cause which Horace Mann declared to be the greatest ever proclaimed by man.

DISCUSSION

RICHARD C. BARRETT, state superintendent of Iowa.—The public domain embraces the area of the lands now owned or heretofore disposed of by the United States in twenty-six states and five territories. The thirteen original states, the District of Columbia, and the "legislative states" of Kentucky, Vermont, Tennessee, Maine, Texas, and West Virginia are not included.

By the constitution "Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States." The supreme court of the United States has decided that the term "territory" is equivalent to the word "land."

"Congress has the absolute right to prescribe the times, the conditions, and the mode of transferring the public domain or any part of it, and to designate the persons to whom the transfer shall be made." The change from territorial relationship to that of statehood in no sense affects the right of governmental control over the lands embraced within the borders of the new states. "No state formed out of the territory of the United States has a right to the public lands within its limits, or can exercise any power whatever over them."

Acting in accordance with the above, Congress has given nearly 80,000,000 of acres for education. In round numbers, 68,000,000 acres were granted for public or common schools, 1,000,000 acres for seminaries and universities, and for colleges relating to agriculture and mechanic arts, 10,000,000 acres.

The educational land-grant policy is older than the present federal government. As early as 1775 an ordinance was adopted by Congress which provided that "there shall be reserved the lot No. 16 of every township for the maintenance of public schools within said township." Both before and after its adoption this ordinance was the subject of controversy and legislation. The government surveyed the lands and made the reservations. Should the schools endowed by the munificence of the government be organized, managed, and controlled by federal or state authority? Not until the admission of Ohio, in 1803, was the question finally determined. It was then decided that the state of Ohio should be a trustee for all school lands within its borders, and the same were appropriated for the use of schools, "and for no other use, intent, or purpose whatever."

The precedent then established has since been followed. Ohio, Indiana, Illinois, Missouri, Alabama, Mississippi, Louisiana, Michigan, Arkansas, Florida, Iowa, and

Wisconsin were by the provisions of law entitled to the sixteenth section in each township for common-school purposes. These were all known as public-land states.

When the act for the organization of Oregon was before Congress in 1848, there was inserted among its provisions a clause calculated in every way to stimulate educational zeal in all states thereafter admitted. Two sections instead of one were to be reserved for school purposes. California, Minnesota, Oregon, Kansas, Nevada, Nebraska, Colorado, Washington, North Dakota, South Dakota, Montana, Idaho, Wyoming, and Utah have each received a grant of the sixteenth and thirty-sixth sections, and the same area has been reserved in the territories.

In Iowa—and presumably the same is partially or wholly true in other states—5 per cent. of the net proceeds of the sales of public lands in the state, and the proceeds of the sales of intestate estates which escheat to the state, constitute chiefly the permanent school fund, the interest of which alone is used for the support of the common schools. In no case may the principal be impaired or diminished.

Land grants for higher education date from the latter part of the eighteenth century. From the admission of Ohio, in 1803, to the present time there have been given to all newly admitted states two townships of lands for university purposes. In the states of Ohio, Florida, Wisconsin, and Minnesota even larger grants were made, the first receiving three sections, the second and third, four sections, and the last, nearly four sections.

In 1862 Hon. Justin S. Morrell championed a measure which broadened the educational policy of the government to a still greater extent. By the provisions of the bill and its supplements, there were granted to all the states, for agricultural and mechanical colleges, 30,000 acres for each representative and senator in Congress to which the state was entitled under the census of 1860.

All the states, including the thirteen original colonies, were embraced under the provisions of this act. By the conditions named Connecticut received as much as Texas, and Delaware the same as Nebraska, Kansas, or Colorado, while New York received ten times as much as any one of the last four named, and as much as Ohio and Kentucky combined.

The moneys derived from the sale of lands granted or of "land scrip" were to be invested in stocks of the United States or of the states, or some other safe stock yielding not less than 5 per cent., and the moneys so invested constitute a perpetual fund, the principal forever to be undiminished. The interest upon the principal can alone be appropriated to the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and mechanic arts.

In giving these lands to the states for educational purposes, was it intended to limit the course of study to such studies only as are related to agriculture and mechanic arts, and military tactics? That such was not the intention is quite evident. Sec. 4 of the original act calls for the teaching of certain branches of learning, "without excluding other scientific or classical studies." Again, in 1884, Mr. Morrell, the author of the bill, in a letter to a member of the upper house of the Iowa general assembly, said: "It was not intended to limit the amount of education in any way so as to prevent a college from having the means and the efficiency of even a university as to languages and mathematics."

The national land-grant policy was established for a special purpose. This is clearly forth in Art. 3 of the ordinance of 1787 in the following words: "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

The wisdom of the policy has been questioned. The Blair bill, which provided for the distribution of $100,000,000 among the states, on the basis of illiteracy, was opposed by

many strong friends of education. They believed that illiteracy, while a great evil, was not the worst; that ignorance should be dispelled as soon as possible, but not at the great cost of losing self-reliance.

During the pendency of the bill a prominent southern gentleman opposed the measure strongly in these words: "You know my deep interest in the public-school system. Hence, I am opposed to national aid. You cannot plaster the South with this system. It is a growth, and its certain and healthy growth can only be secured by each community providing for its own schools." Again, he says it is "the old hallucination, 'fifty acres and a mule,' which has caused more briars and sassafras bushes to grow in southern fields than all else."

It was contended at that time, by those opposed to federal aid, that the land-grant system was demoralizing; that it deadened local zeal and interest. To sustain this view, the following words of the Connecticut secretary of the state board of education were quoted:

> The school fund derived from the sale of western lands yielded an income last year of $120,855, which amounts to 80 cents for each person of the school age. The average expense of educating each of these persons throughout that state is $10.31, so that the fund now furnishes about 8 per cent. of the total cost. In those towns and cities where the people insist upon good schools no reliance is placed upon these permanent funds. Indeed, the history of our state shows conclusively that at the time when the fund was most productive, yielding $1.40 or $1.50 for each person of the school age, and when towns depended upon it, as they generally did, for the support of their schools, the schools themselves were poor and short. In fact, this was the darkest period of our educational experience. A very striking deterioration took place as soon as the fund became productive and the income began to be distributed. Before that period schools had been maintained at least six months, and at most nearly the whole year, according to the size of the district. After, and not long after, this new source of income was opened, the usual length of schools was reduced to only three months, or just the time that this fund would maintain the schools. The sums which came as gratuities relieved the people of responsibility and deadened their interest, until the schools were continued only so long as the charity lasted. Happily the danger from this direction is passed and cannot return. The fund has probably reached its greatest productiveness, and the per capita will constantly decrease. The public schools will draw their sustenance from the people who are directly or indirectly benefited by them.

The experience of Connecticut appears to be a strong argument against all national aid. Let us inquire: Was the administration the best possible? We do not pretend to say it was. However, if the educational policy of the state is bad, the state, and not the national government, is responsible. Local energy and enthusiasm may be stimulated if the distribution of national funds is made to depend upon a reasonable amount of county or district effort.

The plan of distributing the interest upon the permanent school fund according to the total school population might well be changed. If apportioned upon the average daily attendance, communities would have a direct financial interest in having children attend school regularly.

Whatever be the system, however, too much dependence should not be placed upon it. All of the original colonies, which have never received grants of land for the support of common schools and state universities, may receive grants equal to those given other states, and still not have a perfect system nor be greatly helped.

In Iowa the permanent fund for common-school purposes is about four and one-half million dollars. On this amount there is annually appropriated to the different school districts the interest, amounting to about $230,000. This appears to be a large sum, but, when compared with the total amount ($8,451,497) expended annually for schools, is found to be less than 3 per cent.

If the view taken by the southern gentleman be the correct one, the support of the schools generally should be a local affair. The natural order would then probably be: first, the parent; second, the surrounding community; third, the state system; and last of all, national aid. We believe, however, since the government has given to all men the right to participate in the affairs of the government, without regard to race or color, that

it owes it to all, as well as to itself, to fit each citizen that he may exercise intelligently the full privileges of citizenship. This can best be done by the universal system of education.

Can we maintain such a system? We answer, yes. From the cotton and rice plantations of the southland, from the gold fields of Colorado and Klondike, from the corn fields of Iowa and Illinois, from the coal fields of Ohio and Pennsylvania, from the blue-grass region of Kentucky, from the fertile prairies of Kansas and Nebraska, from the New England industrial centers — yes, from all the sisterhood of states, and even from the islands of the sea, the answer comes: "Give us a universally enlightened citizenship!"

Dr. George T. Fairchild, Berea, Ky.—I rise, not so much to discuss the two admirable papers, as to call attention to a fact or two overlooked in the consideration.

1. Congress, by the act of 1890, under leadership of Senator Morrill of Vermont, recently deceased, gives from the proceeds of public lands for the schools of agriculture and mechanic arts an annual appropriation of more than a million dollars. In this all the states share equally, each receiving now about $25,000.

2. While under the act of 1862 states received nominally proportional amounts of public lands for the schools of agriculture and other sciences, the proceeds were far from proportional. The older states, having no public lands within their limits, received scrip to be sold without location at from 60 to 80 cents per acre; while the newer states, like Michigan, Iowa, and Kansas, located the lands to be sold at from $6 to $8 per acre.

3. Texas came into the union with public lands of her own, over which Congress has had no control, and so is a notable exception to the general rule.

Dr. B. A. Hinsdale, University of Michigan.— The subject that has been presented is historically interesting, but whether it is practically important is another question. It is sometimes overlooked that the promotion of education was not the first object with those who worked out the educational land-grant policy of the national government. Such is the fact. This policy was finally established by the legislation attending the admission of Ohio to the union in 1803, and those who carried this legislation thru looked first to enhancing the value of the lands that the government retained by making them attractive to purchasers, and only secondly to the educational interests of the people. Their motive was the same as in exempting lands sold from taxation by the state for the period of five years. This the history conclusively shows. Again, Congress did not vote the thirteen old states and Maine, Vermont, and Texas common-school lands, for the very good reason that the nation had no lands in those states to vote for this or any other purpose. The states themselves owned the public lands within their borders and disposed of them as they pleased. Some of these states, as Massachusetts, New York, and Texas, voted lands for common schools, and some of them did not. It was a state matter. Once more, it is by no means certain that the land endowments which Congress has voted the public-land states for common schools are an unmixed blessing. The common-school fund of Connecticut was once accounted one of the glories of our civilization; it has probably done more harm than good; at least, it was discovered by deserving men as early as the third decade of this century that the fund was teaching the people to rely upon it and to deny the schools the support by taxation that efficiency made absolutely necessary. It is said that things are now working much the same way in Texas. Then, the income derived from these endowments is but a drop in the bucket of what it costs to maintain good schools. The annual income from the Ohio school fund is less than 2 per cent. of the annual cost of the schools, and if the fund should be wholly lost, the people of the state would never feel the difference. In Kansas, I am told, the income from the state fund barely suffices to keep the fires burning in the schoolroom stoves. It may be true that injustice was done to certain states in the distribution of the largesses of the government, but it does not follow, even if this be true, that this injustice can now be

corrected. I do not mean that I am necessarily opposed to the scheme brought forward by the gentleman from Maryland ; but I assure him, and all citizens of that state who are interested in public education, that it will be far safer for them to depend on taxation, state and local, for the support of their schools than to build hopes upon their proper proportion of the deserts and mountains of the great West.

RELATION OF PUBLIC LIBRARIES TO PUBLIC SCHOOLS

BY SHERMAN WILLIAMS, GLENS FALLS, N. Y.

A recent number of the *Cosmopolitan* contained the following statement :

> We educate the child up to the point when it is just about to begin to think. Then we stop. But it is the education received after the student begins to think that is of most importance to the state. It is the thoughtful study that makes the good citizen, the good husband or wife, the efficient workman, and the desirable neighbor. It is the study after leaving primary schools and colleges that counts most in the affairs of life, because this class of study is done understandingly and usually with a direct end in view.
>
> Why should the state go forward just to this point and then, suddenly, drop the student upon his own resources ? Why should not every man or woman who desires to improve be provided with needed facilities, and so encouraged to rise to a higher plane of usefulness to the state ?

This seems a fair statement of existing conditions, of conditions that are likely to continue to exist. It is true, and it is likely ever to be true, that the great mass of children will leave school at an early age, before they are old enough to reason very well. At best, school can give them only a limited amount of information, and lead them to form certain habits and acquire certain tastes. If well done, this is no small nor unimportant work, but it leaves much still to be done. The habits that have been formed are not fixed, and the tastes are subject to change. Much more information is to be gained. New habits and tastes are to be acquired, and the old ones fixed, or modified, or lost. The habit of reasoning is to be greatly enlarged. The real education of the child is yet to be had. Much has been done, yet but little fixed. What are to be the opportunities for the after-school education ? Business relations and associations with one's fellows ? These are powerful factors, but not always helpful ones. These always existed, and have not met the needs. So far as can be foreseen, the public library, properly administered, can do more than any other agency. But, as children grow older, new habits are not so easily formed. The library has little power to reach out and bring the masses within its doors. It has no means of getting a strong hold upon very many of those who do come ; it can do little toward directing the reading that is done ; it merely meets the demand that exists and passes out the books that are called for. In many individual cases much more

can be done, but these cases are, relatively, few in number. If more is to be done — and more should be done — the way for it must be prepared before the pupils leave school, and this can be done only by close and hearty co-operation between the school and the library.

It is the purpose of this paper to bring this subject before you, partly for the purpose of making a few suggestions, but mainly that an interest may be aroused in the work of a committee appointed by the National Educational Association at its Washington meeting to consider and report upon "The Relation of Public Libraries to Public Schools." The chairman of that committee is Mr. J. C. Dana, librarian of the city library of Springfield, Mass. He is arranging for a very complete and elaborate report, covering many phases of the work. He needs your interest and the help that no one else can give so well as you. He, and every member of the committee, will not merely welcome every suggestion from anyone interested in the subject, but you are all urged to do all that you can, either by personal contribution or by suggesting those whose experience will enable them to give assistance. The committee feels that this report can be made of as great value as any ever made upon an educational subject in this country; and it also feels, and knows, that it cannot make such a report as should be made, and as can be made, without the assistance of many experienced persons.

Having made clear the reason why this paper has been written, your attention is asked to a brief statement of what is believed to be existing conditions and future possibilities.

There is, in a large part of the country, a great lack of public libraries. Communities should be led to regard the public library as a necessary part of a system of public education, a part that directly concerns, at any given time, a larger number than does the common school; and it ought, therefore, to be liberally supported. It should be regarded — and, as a matter of fact, should be — the educational center of a town, providing for the wants of the schools, reading clubs, debating societies, lyceums, as well as individuals. For the individual it should provide information upon subjects in which he is specially interested, either as a matter of business or of recreation. It should provide for sensible recreation, information, culture, and specific knowledge on special subjects.

My personal experience leads me to believe that it is quite possible to secure a free public library for any town, and that the superintendent of schools can do more to accomplish this than a man occupying any other position. I feel sure that the lack of public libraries is due solely to a general lack of knowledge as to their value. If it is the duty of the state to see that its citizens know how to read, it is surely no less important that they be led to do the right kind of reading. The mere ability to read does not make a man a better citizen; it simply makes him the easy prey of any clever demagog who has access to the public press. This is shown

by the very common arguments made use of during a political campaign.

Public libraries are not chiefly for scholars, but to train people to love good literature, to do good reading, and to learn to think for themselves.

The failure — so far as it has been a failure — of schools and libraries to co-operate has, I think, been much more frequently the fault of teachers than of librarians; at any rate, the matter has been much discussed at librarians' meetings, and very little, so far as I can learn, at gatherings of teachers. Be that as it may, the beginning of the work must be made by teachers, if much is to be accomplished. They must be thoroly in earnest, or little will be done. They can do considerable without the co-operation of the librarian, while he can do almost nothing without their co-operation. To go a step farther: the teacher will do but little unless the principal is interested, and he will not do much unless the superintendent has his heart in the movement. So we may fairly say that the success of this matter rests more largely with the superintendent than with anyone else. In most instances he can make a success of this work, if he will, and the rapidly growing interest in the matter warrants the belief that it is matters of detail, rather than the general proposition, that need to be discussed.

THE TEACHER'S WORK

The work of the teacher begins with the child's first year at school. He should have stories told to him, and read to him, always with the purpose of creating a taste for good reading. This is now done very effectively in some schools. Almost any child can be trained to love good literature; in fact, nearly every child will prefer good literature to that which is vicious, if the good is presented to him first.

Good literature should be read in school from the time the child is ready to read at all, instead of the "twaddle" that is so common in many of our school readers. As soon as the child can read fairly well, he should be required to do some home reading. This reading should be classified so that he will read, not only fiction, but travels, biography, history, poetry, and essays. There should be groups of books from which he may make his selection, thus giving him a choice; for he must choose for himself when he leaves school; and, at the same time, in a general way, his reading will be directed — directed as to kind, but not as to the particular books he is to read, further than to name a number, as large as practicable, from which his choice shall be made. This plan should be continued thruout the school course, as should the plan of having the teacher read to the pupils — reading a little from those books to which it is desired to call the attention of the pupils, and more largely from books a little difficult for the pupils at that stage of their development — more difficult than they would read for themselves, but not so difficult but that they may be listened to and understood.

The teacher should be sure that her work is such as to send the pupils to the public library. It is not as desirable to have all the books that the pupil should refer to in the school as it is important to have him form the habit of going to the public library before he leaves school.

The reading of good books is largely a matter of habit, and the teacher must see that this habit is formed.

The pupils should early be trained to regard the printed page as a representative of sights, sounds, and ideas. This is not a difficult work. Anything less than this is not reading; it is merely calling words. The teacher must see that during his school course the pupil gets a fair idea of what good literature is, who are regarded as good writers, and the names of some noted books that he has not read.

Children must be taught what a library is, and how to use it. They must be led to know what to look for in a library, and where to look for it. They must be able to use common reference-books. They must be trained to short-cuts in reading, to read books for a single purpose, and to use table of contents, page-headings, etc., in order to get what they want in the least time possible. They should be taught to read reviews, use Poole's *Index*, and card catalogs. In a word, when they leave school they should really be able to read, to know what a library is, and how to use it. Teachers feel the need of meeting with the supervisor of drawing or vocal music for directions regarding their work; still more do they need to meet with the librarian and consult him. They should keep the librarian informed as to their work in history, science, literature, geography, and the like, that he may be in a position to render efficient help. History, as commonly taught, results in making the pupil dislike history, and so does positive harm. The text-book in history is necessarily nothing but a mere outline to be filled in, and cannot be made interesting without much collateral reading on the part of both teacher and pupils. The collateral reading of the pupils may include fiction, biography, poetry, as well as history. All this collateral reading leads to the library. It means, also, help from the librarian, that the pupils may read just what they need, and not waste time by reading much that they do not at that time need, or have time for. What is true of history is true, in a greater or less degree, of many other subjects. Real interest comes from further reading; which means the use of the library.

It must not be forgotten, tho, that the children must be trained in the use of the library. They can no more be left to get their knowledge of literature without assistance than knowledge of science or mathematics.

LIBRARIAN'S WORK

The librarian should know the school and its work well. He should know the teachers. He should be on intimate terms with the superintendent, principals, and department teachers. He should meet with the

teachers from time to time. If possible, he should occasionally address the children. He should impress everyone with the fact that he considers the library a part, and an important part, of the system of public education. He should make frequent bulletins for school use. In some way he must see that the older pupils are trained in the use of a library. He should arrange in some way to send traveling libraries to outlying rural schools. This may require some planning, but that is what he is for. He is not to sit down and bemoan his difficulties, but to devise some way of getting over or around them. He should see that there are some teachers on the library committees, especially on the purchasing committee. He should see that the books in his library are freely accessible to all, and that there is the least possible amount of red tape. He should feel that the books are to be used, not looked at; that they are made to be worn out, and the faster they are worn out the better, if it be done by fair use.

MUTUAL RELATIONS

There must be the most cordial relation between the library and the school. The teachers must know the librarian and the library, and the librarian must know the teachers and the school. He should know the school in a general way as a part of his work, as the teacher in like manner should know the library. The librarian should know the children as well as possible, regarding them as his most important patrons, those whom he can help most.

Librarians generally know books very much better than teachers do, but children not nearly so well; so they need to work together, that each may supply what the other lacks. Children should have free access to the library shelves.

GENERAL

Charles Dudley Warner has truly said that a person who has learned how to read, but not what to read, is placed in a position of great danger. Yet that is just what is being done with the boys and girls in great numbers in our schools. It is not enough that some small effort be made in the high school to train the children to know and love good literature, for most of them never reach the high school; and, if they did, they would have formed a taste for reading before that time, and, if left to themselves, too often a taste for that which is far from desirable. It is a work that must be begun with the beginning of school life — better earlier — and never lost sight of.

Every school should be well supplied with reference-books. There should be a small library in every schoolroom. It might be well for the library to supply this, changing it from time to time.

A chief object — I had almost said, *the* chief object — of school is to train children to read, to use a library effectively. A child's life is not

affected by the ability to read, but by the use he makes of that ability. The school trains for a few years, the library for a lifetime; but the school determines, or may determine, how the library will be used.

DISCUSSION

PROFESSOR ARTHUR ALLIN, University of Colorado.—There is a movement in recent times worthy of all commendation — the movement of our library institutions toward the education and higher culture of the adolescent mind. The state provides a liberal — even a compulsory — education for our youth up to the age of puberty. After this period our high schools and colleges provide for a continuation of the culture process. These institutions, however, reach only a small fraction of the adolescent masses. By the nature of their growth the high schools and colleges exclude the major part of our American youth on account of the high standard of their requirements.

The church has failed almost completely in the same respect. The theater arose from the liturgical drama of the Middle Ages. The church vacated the field. Plays, games, dancing, and other forms of amusement and culture were originally religious in their origin. The church vacated this field also. Our church edifices are for six days each week useless capital, so falsely sacred that they are considered hardly suitable for the education and culture of poor humanity.

The libraries, on the other hand, are branching out as distinct educational forces and processes. Rightly directed they are about the only educational forces which influence the vast uncared-for masses of our growing youth. Lectures by medical men, lawyers, business-men, schoolmen, specialists of all descriptions, might well be extended to include definite regular courses of instruction, possibly under the direction of the city superintendent or a definite board appointed for that purpose.

The response, without doubt, will be astonishing. Anyone acquainted with the psychology of adolescence knows full well the yearnings, ideals, and immense formative capacities of the newly born adult. Think of Edison reading thru fourteen solid feet of the Detroit free library before being stopped! Think of the long list of pioneers, discoverers, reformers, thinkers, scientists, and philosophers who started on their careers at the stage of adolescent enthusiasm!

In short, it is not so much our privilege in this respect; it is our plain, unvarnished, democratic duty toward the unschooled, toward the most impressionable of all school ages, toward our immediate successors in the conduct of public affairs.

SUPERINTENDENT GEORGE GRIFFITH, Utica, N. Y. — First, regarding the place where libraries should be kept: Some argue that they shall be in the schools and under the control of the school authorities; others, that they shall be in places by themselves, separate from the schools and under other control. I unhesitatingly say, both. We need libraries in both places. The functions of these two libraries are somewhat different, but they should always co-operate. The library in the school will be constantly enlisting patrons for the larger library, and should always work toward this end.

Secondly, regarding the control of the public library: I do not assume to speak with any authority with reference to conditions in the large cities, but for the smaller cities, say those with a population of from 10,000 to 100,000, I am very sure that better results will be secured if the public library is under a separate library board, rather than under the control of the school board. I have watched both plans in several cities, and without exception much better results were secured after the library had been taken away from the school board and placed under separate control. When both the library and the schools must be

supported from the same fund, the library invariably suffers from lack of the attention and the funds which are given instead to the general support of schools. These two agencies should always work in harmony, each helping the other; but their provinces and work differ in so many ways that they demand separate control. Separated, each will get more funds for its support, and will be better cared for.

Third, regarding the best ways to get school children to read good literature: They need guidance, they need inspiration from the teachers. Lists of books, arranged by grades, should be furnished. Inasmuch as the development of a love for good reading is the end sought, rather than the accomplishment of a certain amount of reading, I would not impose this work upon the children as a requirement. I would encourage, urge, guide their reading, but never make it a part of the requirements for promotion. I believe the teacher should talk over the book with each child after the child has read it. This should not be an examination. It should furnish the opportunity for suggestion and help toward more and higher reading. It will furnish opportunity to know the individual student in at least one line of his inclinations, and to guide him into purer, higher, and more thoughtful reading.

EUGENE BOUTON, superintendent of schools, Pittsfield, Mass. — In discussing the ways and means of improving the reading of our pupils thru the agency and assistance of our public libraries, we recognize an important aid in our work. By some means our pupils should be made acquainted with sources of information and with standard literature. In Milwaukee, and other cities where the public library is well equipped and co-operates with the school authorities, it is a very important factor in bringing about this result. Such is the case in my own city. But the public library should be an auxiliary to the regular work of the schools, rather than the main reliance in education. The daily reading of the pupils in school should supply the need as far as practicable. If it is desirable that the pupils shall read *The Spy* and become acquainted with Cooper, let *The Spy* be read daily in class. Let the pupils read, in like manner, in the regular reading class, "Evangeline," "Enoch Arden," the *Lady of the Lake*, *Julius Cæsar*, *King Lear*, and such other literary masterpieces as are found to be most desirable and most suitable for the purpose. The public library should be called upon to supplement and amplify what can be done in the direct work of the schools. But the schools should hold themselves primarily responsible for establishing the habits and setting in motion the influences that will lead the pupils to seek the aid of the public library both during their school days and in their after-lives.

THE UNSEEN FORCE IN CHARACTER-MAKING

BY GEORGE H. MARTIN, SUPERVISOR OF SCHOOLS, BOSTON, MASS.

Character grows from within, and every man is in the highest sense a *self-made* man.

A human body is born into the world. It is chiefly a bundle of nerve cells and fibers, plus a system of nutritive organs to promote its growth.

Associated with it in some mysterious way — with it, but not of it — is an immaterial entity that we call a human soul.

Soon a name is given to this being, by which its identity may be distinguished in the future, and by which it may be remembered in a future still more remote.

At once this nervous system begins — to use the language of the physiologists — to react against its environment, and by this reaction a multitude of ideas and thoughts are generated, which constitute the early part of education.

By and by the soul becomes aware of its own existence as something apart from the world of sense by which it is surrounded. You recall that interesting passage in which Richter describes the sunburst of his own subjective consciousness:

> Never shall I forget the inward experience of the birth of self-consciousness, of which I well remember the time and place. I stood one afternoon, a very young child, at the house door, and looked at the logs of wood piled on the left, when at once that inward consciousness — I am a Me — came like a flash of lightning from heaven, and has remained ever since. Then was my existence conscious of itself, and forever.[1]

By and by there is the idea of tomorrow, and then of a succession of tomorrows, forming a future. Then the soul sees itself projected against that future.

Now there come to be two selves, the present self and the future self. There is the Me, the Not-Me, and another Me. Slowly that future self takes shape in an ideal made up of specific qualities of character.

To realize this ideal becomes, henceforth, the work of life. With more or less earnestness of purpose, with more or less persistence of endeavor, with more or less completeness of success, the ideal becomes the controlling motive, the supreme moral force.

In Hawthorne's beautiful allegory, the *Great Stone Face*, you remember how the man Ernest, by daily and admiring contemplation of the face, its dignity, its serenity, its benevolence, came, all unconsciously to himself, to possess the same qualities, and to be transformed and transfigured by them, until at last he stood revealed to his neighbors as the long-promised one, who should be like the Great Stone Face.

So in every human life the unrealized self is the unseen but all-powerful force that brings into subjection the will, guides the conduct, and determines the character.

The early life of Washington is singularly transparent as to the creation and influence of the ideal. We see how one quality after another was added until the character became complete. Manly strength, athletic power and skill, appear first; then, courtesy and refined manners, moderation, temperance, consideration for others; then, careful and exact business habits; then, military qualities; then, devotion to public service. Steadily, but rapidly, the transforming work went on until the man was complete; the ideal was realized. Henceforth, the character, the man, appears under all the forms of occupation and office. Legislator, commander, president — the man is in them all, tho he is none of them.

Cincinnatus at the plow is Cincinnatus still. Washington at sixty,

[1] *Life of Jean Paul* (Ticknor & Fields, 1864), p. 36.

moving in the clamor and confusion of the Genet episode, is the same careful, prudent, patient, dignified, self-respecting, self-controlled, patriotic, masterful man that he had begun to be at twenty-one, when he went on his mission to the French forts on the Ohio.

How does the soul form its ideal? As the bird builds its nest, instinctively, impelled by a law of its life, from materials at hand. The process is simple, and yet complex. Living in a world of men and women, character is ever appealing to him, soliciting his attention and his interest, and evoking his feeling. He sees, he admires, he chooses, he begins to try to be. The elemental psychology of all character-making is summed up in four simple sentences: "I see, I like, I wish I were, I will be."

Just here heredity shows itself. If the mind is temperate in feeling, deliberate in choosing, and robust in its willing, character becomes set and enduring. If, on the contrary, feeling is volatile, choice fickle, and the will flabby, one quality after another awakens momentary admiration and impulse; ideals succeed each other as the vanishing visions of a dream; life is passed in a state of perpetual inward contradiction; and at last the man has earned the judgment of Reuben, "unstable as water, thou shalt not excel."

But the stuff out of which the ideal is made is always character in the concrete, qualities incarnate, not precepts nor codes of ethics.

The process I am describing is not imitation. It is more subtle, more fundamental. Imitation has to do with actions, external things that can be seen. This deals with being rather than doing. It is spirit discerning spirit, and feeling drawn to it; deep answering unto deep.

The process needs also to be distinguished from what is ordinarily thought of as personal influence — one mind and will consciously and purposely bearing upon another to incite to action.

Imitation and influence are seen forces. Their activity goes on in the light of the sun; they can be tracked. But the self-created ideal self draws as the sun draws. This is the mystery of it, and the marvel of it; it may be the horror of it. While parents yearn and teachers labor to fashion character, the character is being fashioned in a laboratory to which they have no key, by a force of whose very existence they are unconscious; a force of which the subject himself may be unconscious.

The sources from which the soul draws its material, and the influences which determine its feeling and its choice, are many and varied — home, social environment, companions, books, schools, and the church.

The process begins with the family life, with father and mother, brother and sister. The child naturally learns to admire the character of those whom he loves, primarily for what they are. The force and courage of father and brother; the patience, the sympathy, the kindness of mother and sister, are appealing traits. But he comes, also, to admire what they

admire. There is no deeper and no more lasting influence than that of ideals of character held steadily before the mind by parents in whom the child has confidence.

Washington's character-making is again suggestive here. Of the influence of his father's character we know but little, but we do know how profoundly he was affected by his regard for his brother Lawrence, a brave, manly, high-spirited youth, skilled in all forms of athletic pursuits, and an ardent soldier. These qualities appealed to the younger brother with compelling force, and formed the most conspicuous elements in his own ideal.

Later his acquaintance with the Fairfaxes added some well-known features. Their courtly manners, their cultivated language, their business habits, their hardy manhood, impressed him deeply; and discerning the inward qualities of which these were signs, we see him framing himself after the patterns they furnished.

The child not only tends to admire what his parents admire, but also what society admires. Thus the social ideal is both a cause and an effect. It becomes the ideal of the individual, and by becoming so is perpetuated as the ideal of society. So peoples acquire and retain for successive generations their distinctive character.

Two illustrations of this must suffice. The ideal of physical excellence and beauty became one of the dominant features of the Greek character. How? By being held steadily before the mind of the children and youth as worthy of all honor and admiration. The victor in the national games, returning to his native city, was received with more than royal honors. Thru a breach made in the walls for the purpose he entered as a conqueror. By processions and sacrifices and banquets the people vied with each other to do him honor. Such a reception made any boy of spirit eager for the training which should make him worthy to be so honored, and he cheerfully submitted to all its rigors, gladly keeping his body under, that it might become a more efficient instrument of the free, all-subduing will, and a more perfect incarnation of it.

In New England homes, in the eighteenth century and the early part of the nineteenth, two ideals of character — social ideals — were potent in education. One was the religious ideal. To be a God-fearing, Bible-reading, sabbath-keeping, church-belonging man or woman was held before the children as the most worthy ambition. They saw such men and women looked up to with respect, and having social standing. Besides this, there was a practical ideal. In every community were men who, by industry and thrift supplementing native sagacity and force, had acquired wealth. They lived in the best houses, they occupied the best pews in the church, they served the parish and the town in positions of trust and honor. They were looked up to by all, and their character was held before the young as worthy of emulation.

In almost every New England home one could have found three books, tho books were scarce — books which in a way typified these social ideals. There was the life of Payson, the mystic young preacher of Portland; the life of Henry Martyn, the ardent young missionary; and, side by side with these, in later times, the life of Amos Lawrence, the Christian merchant.

And in old England, too, who can tell to what extent the contrast between the social life of the present and that of the Restoration period is due to the loyal reverence which her people feel toward the gracious woman who has been, not only the mother of queens, but also the queen of mothers?

Not only from home and society does the child get material for his ideals, but also from books. While Lincoln lived, men marveled that such a man could have come from such beginnings. Such breadth of understanding, such loftiness of purposes, such singleness of aim, such rectitude, such tenderness, such patience, such charity — they seemed effect without a cause. But when, in after-years, men learned that the companions of his youth had not been only the rough associates of the frontier life, but the men and women of the Bible, *Pilgrim's Progress*, Plutarch, and Shakespeare, they wondered no longer. He had been walking with the world's worthies, and they had made him great.

So our boys and girls, all unknown to us, often all unconsciously to themselves, are admiring the characters they find in the books they read, and are fashioning themselves into the same image.

The schools, too, are doing their part. Thru the literature and history, there is no limit to the possibilities within the reach of every teacher.

Character in history, character in literature, illuminated in the portrayal by the enthusiastic admiration of the teacher, glows before the student and kindles within him a responsive emotion. As the long line of men and women who have lived and wrought and suffered moves before him, he feels nobler impulses stirring within him, and he sees himself living such a life; and with the thoughts and the impulses the work of transformation begins.

Wherever their story has been told, Leonidas and Horatius have stood in hours of peril, "i' the imminent deadly breach." They have come fighting down the ages. Such men never die. Rienzi and Garibaldi and Emmet are not dead. Havelock and Gordon and Warren live in thousands of young men today, who have caught their spirit and are being transformed into their likeness.

The men of Edinburgh are of a different fiber because they have read the names of their fathers on the tablet in the old church of St. Giles commemorating the four hundred sons of Scotland who went down in the Birkenhead as calmly as if on parade, that the two hundred women and children might be saved.

And I fancy the young men of Switzerland have wrought themselves into a different type because the lion of Lucerne has reminded them of the loyal heroism of the Swiss guard at the Tuileries.

This is Browning's meaning when David says to Saul: "Each deed thou hast done dies, revives, lives again, goes to work in the world." This is the crown of life promised to all those who are faithful unto death.

Who can tell how many women are patiently carrying their burdens of domestic suffering because of the unwearied, unquenchable love of Jennie Deans, and little Nell, and Florence Dombey?

Just here light is thrown on the most effective way to deal with biography in school work. Modern criticism professes to respect the truth, and would have no glamour thrown over the characters in history; there should be no aureole about the heads of the saints. But is there not profoundest significance in the fact that every year millions of children come to believe that bells are ringing and flags are flying in honor of a man of whom the only thing they know is that he never told a lie?

For all the higher purposes in the education of the young, is it not better for them to be told of Washington the True than of Paul Leicester Ford's *True George Washington?*

Here is the most hopeful field for our child study. To ascertain by syllabus and questionnaire how many children like rag dolls better than painted ones, and how many are afraid in the dark, is worthy of the highest efforts of a university and of doctors of philosophy; but to learn at what shrine of human character the boys and girls are worshiping in the Lararium of their own souls, what Great Stone Face is silently but resistlessly transforming them into its own likeness, this is work worthy of a teacher, and, I had almost said, nothing else is.

The teacher does this work by what he teaches, but infinitely more by what he is. "How can I hear what you say," wrote Emerson, "when what you are is continually thundering in my ears?"

There have been some splendid examples of teachers thus building themselves into the character of their pupils. Last year, in the London *Graphic*, were printed these words: "It will be told in after-days how there was once a heaven-born head-master, by name Thomas Arnold, who, ruling at Rugby, taught the boys to be good Christians, true gentlemen, and be merry, mischievous boys still." Men have wondered at the marvelous influence of Arnold over his boys, an influence reaching on into their after-life, so that the Rugby boys were distinguished at college and beyond. But when we study his life with his boys at Laleham, as well as at Rugby, there is no marvel. When we see him sharing their sports, when we see him in the evening at work in the midst of his boys, annotating his *Thucydides*, writing his *Roman History*, composing his pamphlets on church and state affairs, we see that the boys learned from him two profound lessons which they carried with them into all their

public life — that there could be learning without pedantry, and religion without cant.

Similar to this was the work of Mary Lyon. Steadily, without interruption or intermission, she held before the girls at Mt. Holyoke the ideal of a consecrated Christian womanhood. To this end, all the studies, all the exercises, all the influences were made to contribute. So completely did the ideal of her own life become the ideal of their lives that most of the girls went out as avowed Christian women. Wherever they went, they carried this spirit. Wherever they taught, they set up a new Mt. Holyoke, a Christian seminary. Wherever they married, they set up a Christian home. And so powerfully did the ideal work thru the sixty years of the history of the school that more than two hundred girls have become foreign missionaries.

And what Thomas Arnold and Mary Lyon did, thousands of teachers in all spheres of influence, from the kindergarten to the college, are doing today.

We hear sometimes, from lips of ignorance, a charge of moral failure against the public schools. I have no hesitation in affirming that the public-school teachers are doing more to help in forming ideals of worthy lives than all other agencies combined.

This too, I take it, is the exalted mission of the church: by all its services and all its ordinances, by all its orders and all its offices, in all its individual and collective life, to hold before the world, and especially before the children and youth, the divine life as the ideal life; that life of which all noble and virtuous and self-sacrificing human lives are but faint reflections; that life which has been the supreme moral force in all human history for two thousand years. The ideal of that life has molded the character of the world's worthies, and prompted their activities. Thru them it has reclaimed wildernesses, civilized savages, abolished slavery, sanctified homes, founded schools, built hospitals, dignified childhood and womanhood and manhood.

It has been the impelling force in all great lives. It made Francis D'Assisi devoted, and Savonarola strong, and Bernard of Clairvaux great. It transformed alike Luther and Loyola. It sent Xavier to the far East, and Livingstone to the Dark Continent, and John Howard to the prisons of Europe, and Clara Barton to the perishing in Armenia and Cuba; and from their comfortable homes in rural England it brought to the barren and inhospitable shores of the new world the men and women who laid the foundations of the institutions we are trying to perpetuate.

They can only be perpetuated in the spirit in which they were founded. The same qualities of character, made more brilliant by added centuries of triumph, must be wrought into the ideal of the generations which will inherit the twentieth-century problems.

The physical problems give us no solicitude. Mathematics and

mechanics will take care of them all. We can build docks and ships and canals. But for those other problems which concern human life and human happiness, those problems whose perplexing factors are human interests and passions, we need something else. Only when the mighty forces that make for education — the home, society, the school, and the church — unite in placing on the noblest and most conspicuous pedestal in the gallery of human virtues the divine ideal of service, to the end that every man may be a good Samaritan, and every woman a sister of mercy, will these problems be in a way to be solved. This only can purify politics at home, and guide to wise and beneficent issues our expanding politics abroad ; this only can allay the warring passions of employers and employed, and make the opulent and the vagrant co-operative ; this only can sweeten city life now cursed with the tenement house, the sweat-shop, and the slum.

The thought I am trying to present is not merely a sentiment born of the school and the church : it is emphasized by the most advanced conclusions of modern science.

Looking back along the line by which man has come to his present estate, biologists tell us that progress has always been conditioned on conformity to environment. As physical conditions changed, those forms of life survived which changed to fit them. The ever-changing environment demanded more and more complexity of structure, more and more differentiation of function ; and so advance was made from amœba up thru worm and vertebrate to man, always by the inward impulse responding to the outward needs. So man himself has grown ; the inward impulse no longer a blind, unconscious reaching after something to be physically felt, but a conscious effort to adapt himself to an environment in which mind was supreme.

As the centuries have come and gone, the social environment has become more and more complex, demanding ever higher mental and moral attributes. An ever-widening horizon has called for an ever keener and more far-sighted vision ; an ever-closening contact has demanded an ever-deepening sympathy.

But the law of evolution contains no guarantee of universal advance. Arrest, retrogression, disappearance are as legitimate and as frequent as progress. Every step in the ascent of man has been accompanied by the descent of man. Herein we see the possibility of our failure as well as of our success.

So far as the co-operative forces succeed in helping any child or youth to fashion a self-ideal which shall fit the new and larger and more inexorable social demands, so far have we fitted him to survive, and we have brought into a little clearer vision that far-off divine event to which the whole creation moves.

DISCUSSION

S. B. LAIRD, superintendent of schools, Lansing, Mich.— Character-building is the objective point toward which all earnest school work tends. There are several elements which enter into the meaning of this term. The first one we will notice is industry. Our pupils should be taught not to look down upon work, but rather to look up to it. They should learn, not only to love work, but also to regard it as God's greatest blessing to the race, the agency by means of which civilization has been advanced. This industry should be controlled by method, by system, so that the truest economy will be practiced in its exercise. Another element is that of reverence. There should be a reverence for the Creator which recognizes the responsibility of the creature and cheerfully pays the homage due. There should also be found in his thought a reverence for mankind, which grows out of the relationship of brotherhood. Reverence for self is also essential, whether regarded physically, mentally, or morally. James A. Garfield, whose memory in this capital city must be regarded as precious, once said in effect: "There is one person whose good opinion I care more for than for that of all others, for with him I have to walk, to eat, to sleep, and to live; and that person is myself." Self-respect, fully understood and rightly applied, is a powerful lever in uplifting human nature. Finally there must be a reverence for country, for its history, institutions, and laws. Intelligent patriotism not only loves the flag and the principles symbolized by it, but it also holds the life true to all the responsibilities as well as to all the rights, to all the duties as well as to all the privileges, of citizenship. It recognizes the importance of the problem of self-government which the United States is trying to solve, and lends to that solution the force and influence of a true life. Other elements might be mentioned, but the above must suffice.

The question now occurs: What forces, unseen, or at least unrecognized at their full value, tend to the development of the essential elements of character? We answer: First, the personal element, or the unconscious tuition which makes itself felt thru the eye, the expression of face, the voice, and the controlling spirit of the life. Undoubtedly, each of us can recall some teacher whose influence for good in our lives has been a known and positive quantity ever since we left the halls of learning as pupils. I desire to pay a brief tribute to one of Michigan's noblest sons, Joseph Estabrook, who for a half century inspired his pupils to desire to make the most and the best of life, and hundreds of men and women in places of trust and honor in our state recall his noble service and declare his memory blessed. Tho dead he lives in hundreds of lives, made stronger and purer by his example and unconscious influence. Other silent forces which are contributing much to character-building in the school are casts, pictures, and music. We are just discovering the value of these agents, and we predict that in the coming decades the teachers who desire to build into the lives of pupils the grandest specimens of serviceable characters will find much aid from these sources. The potent but unseen power resident in good literature constitutes another source of help in the solution of this problem. The good book, containing just the lesson needed for boys or girls, can often be placed in their hands and be left to speak to their lives in tones both strong and convincing. The results sought for demand for their realization the combined efforts of the home and the school. The words, "When the heart of the home is in league with the brain of the school, it is well for the child," find their assent in our experience.

We have dwelt thus far upon the phase of life known as good character, and we wish that none other existed. We cannot be blind to the fact, however, that, despite the influences of both seen and unseen agencies, evil characters are found in the schoolrooms, contaminating the good and weakening the power of the best teaching. What forces thus combine to disappoint our hopes and sadden our spirits? We answer: The cigarette, the influences of the street school, obscene literature and pictures. Impurity of thought,

leading to impurity of action, constitutes one of the most subtle foes which we have to encounter. The question, "Who is sufficient for these things?" finds a place in our thoughts very often. We may well voice the prayer of Horace Mann, who, just before devoting his life to the school system of Massachusetts, which he desired to lift to a much higher plane of efficiency and power, poured out his soul's desire in the following words: "God grant me annihilation of selfishness, a mind of wisdom, and a heart of benevolence."

THE TRAINING OF TEACHERS FOR SECONDARY SCHOOLS

BY JAMES E. RUSSELL, DEAN OF TEACHERS' COLLEGE,
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The striking characteristic of American education is the fact that each school — better said, perhaps, each school board — is the measure of all things educational. And nowhere is this sophistic doctrine more apparent than in the secondary realm. What constitutes a secondary school, even the scope and purpose of secondary education itself, are debatable questions. This condition of affairs is largely due to the radically different tendencies in the development of our educational system. Part of it has come down from above in response to the intellectual and spiritual needs of colonial life; part of it has grown up from below to meet the demands of an ambitious people determined to win its way in the world. These two forces — one of them essentially aristocratic, the other essentially democratic — meet in the secondary school. The conflict that results naturally makes extra-hazardous any attempt to apply general principles derived exclusively from experience either in elementary or higher education. Dictatorial college faculties too frequently join hands with ignorant demagogs in promoting evil in place of good. The secondary school is not merely the first four grades of the college course, nor yet is it the last four classes of the elementary school; it is at once both of these and neither. The training of the adolescent mind presents problems unknown in the primary school; with the psychological new birth another mode of education becomes imperative. And, on the other hand, it is obvious that the requirements for admission to college do not exhaust the demands of life. The college and university can never enjoy a monopoly of higher education. The peculiar function of the secondary school is the selection and training of leaders for intelligent service in academic, professional, and industrial life. In no educational work can there be greater need of teachers fully alive to the responsibilities resting upon them; nowhere can there be greater need of teachers fitted by nature and training to discharge their duties aright.

It is only in these latter days that any question has arisen concerning the necessary qualifications of teachers for secondary schools. So long as the only secondary school of consequence was the academy or college-

preparatory school, so long the only teacher worth considering was the college graduate. He who would successfully fit boys for college must himself know by experience what the colleges demand. Moreover, in those days what the colleges demanded was chiefly Latin and Greek, and it would have been idle for any man to have set himself up as a teacher of the classical languages who had not enjoyed the classical training. But with the growth of the curriculum, and especially since the rise of the high school has introduced variety, not only in the subjects of instruction, but in the purposes of secondary education as well, the former source of supply of teachers has proved inadequate. It may as well be acknowledged first as last that the college graduate of the last generation could claim no considerable superiority over his non-collegiate competitor in respect either to special knowledge or skill in teaching many subjects of the secondary course. In fact, only in the classical languages has he stood unrivaled. In the modern languages, English, history, mathematics, and the natural sciences he has often found his equal. Frequently the knowledge of the specialist, or the professional skill of the normal-school graduate, has been preferred to the so-called "general culture" of the collegian who has sauntered thru the mazes of an "elective course" with no suspicion of sound scholarship attaching to him. Unquestionably the lack of special knowledge and of pedagogical interests in the average college graduate has had great weight in promoting the popular tendency to discredit a liberal education as an essential prerequisite to work in the secondary schools. We may deprecate the situation as we will, it is a fact, nevertheless, that the college-trained teacher has but slight advantage in gaining admission to the secondary school.

One other fact is worth consideration. It is becoming year by year more difficult for college graduates to find employment in the schools at a living wage. Granted that the number of positions annually falling vacant is relatively stationary, and that the number of applicants is relatively increasing, but one result can be expected. The law of supply and demand forces salaries down. And in the majority of secondary schools in this country today no pecuniary inducement is offered the intending teacher to take a college course. On the contrary, there is every reason — uncertain tenure of office, political favoritism, and the like — why the average teacher should invest in the least possible amount of paying capital. Indeed, so lightly is the higher education regarded that it is a question whether the average teacher who must depend on the average salary can afford to spend the time and money necessary in acquiring the college degree. If this be true, or anywhere near the truth, then secondary education in America is in desperate straits.

The educational welfare of the country obviously demands that public opinion recognize a higher standard of professional merit. Public opinion, however, is a shrewd judge of merit of any kind. With respect

to teachers as in other matters, Lincoln's aphorism is true: "You can fool all the people some of the time, and some of the people all of the time, but you can't fool all of the people all of the time." The college graduate has been carefully weighed these many years past, and too frequently he has been found wanting. The specialist and the normal-school graduate have also been tested, and the popular verdict is that they, too, are poor craftsmen. But with nothing better in sight, and with no recognized standard of professional fitness, the school board and the wage it offers have come to be the controlling power. Moreover, it is evident, I think, that this condition of affairs cannot be materially changed so long as the chief factors in the problem remain the same. Our only hope lies in the introduction of a new factor more powerful than any now existing — the professionally trained teacher specially fitted for secondary work.

It may be argued that, inasmuch as the cost of a college education even now tends to exclude the best material from the majority of schools, no further expense can reasonably be expected by way of special preparation. While I acknowledge the strength of the argument and fully realize that ultimately professional standards must conform to economic laws, I must still insist that a distinctly good thing appeals powerfully to the common-sense of the American people. And if the American people see that a thing is worth having, they know how to pay for it without grumbling. The better class of secondary schools the country over pays fair salaries and insists on getting the ablest teachers. The very fact that competition for these positions is so disagreeably keen is the surest guarantee of a better system of training teachers for secondary schools. An annually increasing number of college graduates learn from experience that the best preparation they can make is none too good for the places they desire to fill. They cannot afford to compete, other things being equal, with those whose preparation has been less expensive than theirs; the only hope of the ambitious collegian is to put himself distinctly above his competitors in his chosen field. He must do as the business-man does under analogous circumstances — increase his capital and make ready for a bigger business. This is the opportunity of the departments of pedagogy and of the teachers' colleges. It is precisely this condition of affairs which makes possible for the first time in America a serious consideration of ideal methods of training teachers for secondary schools.

But what is the ideal preparation for such teachers? First let me premise that the only method for us is to build on what we have, meet the demands of the times, while aiming at something better. Present conditions seem to me to indicate four qualities pre-eminently desired in the teacher: (1) general knowledge, (2) professional knowledge, (3) special knowledge, and (4) skill in teaching. The inability of the average

teacher to present these four qualities in due proportion is the principal cause of the prevailing chaos in secondary education.

1. *General knowledge.*—Four years ago the Committee of Fifteen reported to this department that "the degree of scholarship required for secondary teachers is, by common consent, fixed at a collegiate education. No one—with rare exceptions—should be employed to teach in a high school who has not this fundamental preparation." Such a qualification seems reasonable enough. The liberal culture implied in four years of training in advance of the grades to be taught is surely not too much to require from every applicant for secondary teaching. The fact that the secondary teacher is to some degree a specialist, that he knows his subject and exercises considerable ingenuity in satisfying the requirements of college entrance or some examining board, is no indication that he has a world-view of sufficient breadth to justify him in attempting the training of youth, or an understanding of related studies sufficient to enable him to teach his own subject in a scientific manner. The inspiring influence that comes from well-developed manhood or womanhood taught to view the subject-matter of secondary education in a comparative manner, trained to see the relationships everywhere existing in the various spheres of knowledge—yes, the unity pervading all knowledge—is an influence that the secondary school can ill afford to neglect.

2. *Professional knowledge.*—It is equally important that the secondary teacher be able to view his own subject and the entire course of instruction in its relations to the child, and to society of which the child is a part. A teacher may be able to teach his subject never so well, may even have the reputation of being a distinguished educator, yet his life long be a teacher of Latin, or physics, or history, rather than a teacher of children. The true educator must know the nature of mind; he must understand the process of learning, the formation of ideals, the development of will, and the growth of character. The secondary teacher needs particularly to know the psychology of the adolescent period—that stormy period in which the individual first becomes self-conscious and struggles to express his own personality. But more than man as an individual the teacher needs to know the nature of man as a social being. No knowledge, I believe, is of more worth to the secondary teacher than the knowledge of what standards of culture have prevailed in the past or now exist among various peoples, their ideals of life and their methods of training the young to assume the duties of life. Such study of the history of education is more than a study of scholastic institutions, of didactic precepts, or the theories of educationists; it is *Kultur-Geschichte*, with special reference to educational needs and educational problems. It gives that unifying view of our professional work without which it is idle to talk of a science or a system of education; it prepares the way for the only philosophy of education which is worth teaching. Under professonial

knowledge I should also include such information as can be gained from a study of school economy, school hygiene, and the organization, supervision, and management of schools and school systems at home and abroad. Some of this technical knowledge is indispensable for all teachers; all that can be gained is not too much for those who will become leaders in the field. But the least professional knowledge that should be deemed acceptable is an appreciation of the physical conditions essential to success in school work, and a thoro understanding of psychology and its applications in teaching, of the history of education from the cultural standpoint, and of the philosophic principles that determine all education.

3. *Special knowledge.*—The strongest argument that can be urged against the average college graduate is that he has nothing to teach. The argument applies with even greater force to the normal-school graduate, however well he may be equipped on the professional side. Neither liberal culture nor technical skill can at all replace that solid substratum of genuine scholarship on which all true secondary education rests. A teacher with nothing to teach is an anomaly that needs no explanation. And I count that knowledge next to nothing which must be bolstered up by midnight study to hide its defects from a high-school class. No one who knows the scope, purpose, and methods of collegiate instruction, no one familiar with the work of the normal school, will posit for a moment that such training necessarily gives any remarkable degree of special knowledge. I say this without any disrespect either to the college or the normal school; it is not the first and foremost duty of either of these institutions to turn out critical scholars or specialists in some small field. But special scholarship, I maintain, is an absolute necessity in the qualifications for secondary teaching. Without it the teacher becomes a slave to manuals and text-books: his work degenerates into formal routine, with no life, no spirit, no educative power, because he knows no better way; the victims of his ignorance rise up to call him anything but blessed, and take their revenge as citizens in ignoring altogether professional knowledge in the conduct of public-school affairs—because they, too, know no better way. Now as never before, I believe, do we need to emphasize the possession of special scholarship as an essential prerequisite to secondary teaching. Only the other day I learned that a principal of a secondary school in my own state is undertaking the teaching of Latin after a six-weeks' preparation in a summer school. What a travesty on classical instruction! It would seem that no argument were necessary to convince a Yankee that there is virtue in perfect tools; but somehow the idea is abroad that the perfect tool is the perfect text-book. Now is an opportune time to convince the American people that it is "the man behind the gun," rather than the gun itself, which counts.

4. *Technical skill.*— It is safe to say that no quality is more earnestly desired in the teacher, or more persistently sought for, than the technical ability to teach. The first question asked of an applicant is not, "Has he had a liberal education?" or, "What is his professional knowledge?" or, "Has he anything to teach?" but this: "Can he teach?" The popular mind fails to recognize the interdependence of these qualities, and, failing in this, it bases judgment of a teacher's ability on the relatively nonessential. Ability to maintain order in the class-room, to get work out of his pupils, to satisfy casual supervisors and examiners, to keep fine records, and to mystify parents — this too frequently passes for ability to teach. How seldom, indeed, is a teacher tested by his ability to get something *into* his pupils, by his ability to impart his knowledge in a way that shall broaden their horizons, extend their interests, strengthen their characters, and rouse within them the desire to lead a pure, noble, unselfish life! School-keeping is not necessarily school-teaching. The technical ability to teach includes both. The art of teaching is mimicry, a dangerous gift, unless it is founded on the science of teaching, which takes account of the end and means of education and the nature of the material to be taught. School-keeping may be practically the same for all classes of pupils, but true teaching must always vary with surrounding conditions and the ends to be attained. Graduates of colleges and normal schools alike must fail in technical skill, if they teach as they have been taught. The work of the secondary school is unique. It requires an arrangement and presentation of the subject-matter of instruction in a way unknown in elementary education and unheeded in most college teaching; it requires tact, judgment, and disciplinary powers peculiar to the management of youth. Herein is the need of that technical skill which is not, as has been well said, "a part of the natural equipment of every educated person."

A survey of the field of secondary education discloses that these four essential qualifications of the secondary teacher are everywhere recognized in practice. The difficulty is that few teachers unite them in due proportion. The thoroly trained teacher, trained by study and tested by experience, has no difficulty in finding employment, or holding his place once he finds it. Those who have positions to fill are eagerly scanning the professional horizon, and are thankful for some refreshing sign, even tho it is no larger than a man's hand. The function of the teachers' college and the university department of pedagogy is to establish a better code of professional signs and to insure more perfect realization of professional promise.

The experience of Germany in the training of teachers for secondary schools is deserving of careful study. Not, however, because the German system is perfect or directly applicable to American conditions — I have grave doubts whether Germany has much to offer us by way of direct

contribution — but because Germany has developed, during the present century, a magnificently trained body of secondary teachers, despite hindrances much more perplexing than those now confronting us. The lesson from German experience is that to liberal culture you must add special scholarship, and to special scholarship professional knowledge, and to professional knowledge technical skill; these four — no one of which may be neglected.

The intending teacher in the secondary schools of Germany must first of all be a graduate of a recognized secondary school having a nine-years' course of study strictly prescribed in every detail. At the end of this period — say, when the student is nineteen or twenty years of age and ranks with our college juniors — the university course is begun. During the next four or five years there is unrestricted freedom of choice in life and study. The student, on coming up to the university, knows full well what profession he is to follow; and the intending teacher has his specialties already in mind. In general, the greater part of his work is directed to those subjects which he expects to teach, or, better, to those subjects in which he will later be examined.

The state examination is the sole test of a candidate's preparation for any professional career. Neither the degree of doctor of philosophy nor any other scholarly distinction can exempt him from the necessity of proving himself before a state board of examiners.

The aim of the state examination is to test (1) the applicant's proficiency in pedagogy and philosophy, including psychology, logic, and ethics; (2) his familiarity with the German language and literature; (3) his acquaintance with the doctrines of his religion, and (4) his knowledge of the subjects which he expects to teach. In all these lines, possibly excepting religion, he will have had special training under university professors. In philosophy and pedagogy, in German and in religion, the requirements are of a general nature, intended to disclose the applicant's breadth of training and the nature of his religious faith; it is the fourth requirement that constitutes the crux of the examination — viz., special knowledge.

The subjects which are taught in the higher schools — therefore those in which state examinations may be taken — are classed in two general groups: the language-history group and the science-mathematics group. The former includes German, Latin, Greek, French, English, and history; the latter includes mathematics, physics, chemistry and mineralogy, botany and zoölogy; geography may be classed in either group. Of the four subjects in which every teacher is examined, the first two are known as majors (*Hauptfächer*) — those which he prefers to teach; the other two are minors (*Nebenfächer*).

The university student who looks forward to teaching as a profession early selects the combination of subjects which he prefers to teach, or

which is likely to bring most rapid promotion. To these subjects he gives his main attention for three to five years during his university course.

The examination is both oral and written. The written test comes first, and consists in the writing of elaborate essays on themes assigned by the commission. One theme is on some topic in philosophy or pedagogy, and is designed to test the candidate's knowledge of the philosophical basis of pedagogy and didactics, and of the development of educational thought since the sixteenth century. The candidate must also write essays on themes selected from each of his major subjects. When one essay will include both major subjects, the two may be combined, as frequently happens in classical and modern philology, physics and mathemathics, history and geography, etc. If the applicant has published something of note, as, for instance, a dissertation for the degree of doctor of philosophy, it may be offered as a substitute for one of the essays. Six weeks are allowed for the preparation of each essay, and the commission is empowered to grant an extension of six weeks — making twelve weeks in all, if necessary, on the subject.

The oral examination is intended to test the general culture of the candidate, and his ready command of philosophy and pedagogy, and to ascertain his fitness to teach his chosen subjects in a higher school. The examination in each subject is conducted by a specially appointed examiner, in the presence of other members of the commission. Thus it will be seen that the examination requires the better part of a year, and is as searching as can be devised in a country where teachers are all too plentiful.

The intending teacher, even with his certificate in his hand, has yet other gauntlets to run. The certificate of itself confers no right to teach. Something more than general culture and minute scholarship is required. It is safe to say that Germany owes more to the pedagogical training of her teachers than to any other factor in their preparation. It is the professional spirit, which every German teacher feels, that differentiates him from his species in other countries, and this spirit is the result chiefly of his pedagogical training.

Much of the professional training of the German teacher is given in the universities. Courses in philosophy, ethics, logic, and psychology, and in the history and principles of education, are everywhere given. But with all the general preparation that he can make, the intending teacher must spend one full year in a teachers' seminar, where he is trained in the special methods of presenting the subjects in which he is officially declared to be proficient, in teaching under guidance, and in familiarizing himself with the practical workings of a secondary school. Systematic study of practical pedagogics and school economy is also required thruout the year.

But even with this preparation the candidate may not begin his life-work. Another year of trial is required in Prussia, during which there is constant practice in teaching in a public school, under the criticism of regular teachers designated for that purpose. Thus at the end of sixteen years' continuous preparation — nine in a secondary school, four in the university, one in examination, and two in practical training — the successful candidate may enroll his name on the official lists and await his turn for permanent appointment. There ought to be no doubt of his qualifications.

But in America few states make any specific requirements of high-school teachers over and above what is required of teachers in the grades. The result is that the weaker schools are filled with teachers inadequately trained for their work. It is probably true, however, that such schools get all they pay for. Economic conditions, as I have already indicated, do not permit the best teachers to enter these schools. And, on the other hand, the unseemly scramble for places in the better grade of schools tends to provoke unprofessional conduct and to place even the thoroly equipped teachers at the mercy of partisan school boards. Fortunately this tendency is held in check by the good sense of many patrons of our secondary schools, and by the good offices of far-sighted superintendents and principals of schools. The fact remains, however, that it is not because of state regulations, but in spite of them, that secondary education in America is upheld in its integrity.

I am not of those who believe that legislation is the only remedy, or the best remedy, for existing evils — social or educational. In face of the prevailing economic conditions, and with the present supply of secondary teachers, it is useless to urge the enactment of laws requiring a higher standard of academic or professional qualifications. Change the economic conditions, or improve the quality of professional preparation, and I believe legislation will follow as a matter of course, or be found altogether unnecessary. Nor do I see that the economic conditions affecting secondary teachers can be materially changed until the public comes to recognize that we have laborers worthy of a better hire. In a word, the burden of improving the condition of the secondary teacher in America rests primarily upon the colleges and universities of America. And this is the task which the departments of pedagogy and the teachers' colleges must assume.

How is it being done? First of all it must be remarked that by far the larger number of colleges giving courses in education seem to consider the work in its non-professional aspect. The science and art of education are regarded as subjects for research and investigation, or as means of liberal culture akin to history and political science. Such work has its place, but unsupported it plays no very important rôle in training teachers for secondary schools.

I find that the institutions giving professional courses in education for intending teachers in secondary schools are in general agreement as to what should be done, altho few of them are able to realize their ideals. The diploma, or teacher's certificate, which is granted on the completion of a prescribed course in the best colleges requires as a rule the bachelor's degree, and a certain amount of work in the history and philosophy of education, and in psychology and its applications in teaching. California and Nebraska seem to lead the way in requiring that candidates for the teacher's certificate at the time of receiving the bachelor's degree must observe the following conditions:

a) *Special knowledge.*— The completion of work, amounting normally to twenty hours a week for one half-year, in the subject or group of closely allied subjects that the candidate intends to teach.

b) *Professional knowledge.*— The completion of work in pedagogy, amounting to twelve hours a week for one half-year. Four hours for one half-year may be taken in psychology or in a special "teachers' course" in some other department.

c) *General knowledge.*— Courses sufficient to represent (with the inclusion of special studies) four groups from the following list: natural sciences, mathematics, English, foreign languages, history, philosophy. The requirement is intended to secure, so far as is possible, breadth of culture and sympathy with the various lines of high-school work.

(A "group," as I understand it, is about twenty hours for one half-year.)

The chief defect in the California plan is that it provides for no systematic practice in teaching under criticism. There is provision, I understand, for observation of high-school teaching under the guidance of university instructors, but the need of actual practice in teaching is felt in the universities of California, Nebraska, Kansas, and Wisconsin, where plans are being perfected for such work in the public schools.

In the East, on the other hand, some excellent object-lessons in the art of teaching can be seen. Properly qualified students in Brown University are enabled to teach half time in the public schools of Providence, for which they receive half pay; meanwhile they carry on graduate study in the university. In Harvard University, Professor Hanus informs me, "through arrangements made with the neighboring cities of Newton, Medford, Everett, and Brookline, students have special opportunities to teach for practice, under direction. Each student is required to teach not less than two, nor more than six, periods per week for half the school year in some one subject." In explanation Professor Hanus remarks: "I do not believe in playing at teaching."

An interesting experiment is also being tried in Brookline, Mass., where Superintendent Dutton is doing the work of the German *Gymnasial-Seminar*. He admits to his seminar only qualified college graduates. These students he meets in conference occasionally while they are systematically observing and teaching in his schools.

These indications all point one way. The outline of the future professional school for secondary teachers can readily be discerned, I think, in the composite of existing schools. Such a school will grant diplomas or degrees to qualified candidates, but not a blanket certificate that certifies to the fitness of the holder to teach anything anywhere he gets the chance. The intending teacher in secondary schools must earn his right to teach each subject in which he wishes a diploma, in addition to the right to teach at all. The lowest requirements which we can consistently make for such a diploma are as follows:

1. The candidate must be a college graduate, at least when he receives the diploma, if not when entering upon the course.

2. He must satisfactorily complete courses in (*a*) the history of education, (*b*) the philosophy of education, (*c*) psychology and its applications in teaching, and (*d*) school economy, especially school hygiene—an allotment, say, of eight hours a week thruout one year.

3. As evidence of the special knowledge required in each subject in which a diploma is sought the candidate should be able to show the equivalent of at least three years' collegiate study of that subject—three to five hours a week. In the University of California a total credit of ten year-hours is required; in Nebraska it is twelve and a half year-hours, and in Michigan some departments insist on as much as twenty-five year-hours for the teacher's certificate. But whatever be the requirement in credit hours, provision should be made for securing a sufficient degree of special scholarship as a prerequisite to what I consider the gateway to actual teaching, viz., a course in the special methods of teaching each subject elected. Such a course may very properly be conducted, wholly or in part, by the university department which is responsible for the academic training in subject-matter.

4. The candidate must be given opportunity to observe good teaching, study its methods under guidance, and finally give instruction under normal conditions long enough to demonstrate his ability to teach.

This plan will enable a thoroly good college student, who chooses his electives wisely, to secure a teacher's diploma in one or two subjects, e. g., Latin and Greek, physics and chemistry, at the same time that he gets his bachelor's degree. For the college graduate it provides a one-year professional course which will enable him, granted that he has the requisite academic preparation, to secure a diploma in two or three related subjects.

In closing, I am happy to say that the scheme just outlined is no utopian dream; it is being realized, wholly or in part, in several of our universities. That it is entirely practicable I am able to affirm from my own experience in Columbia University. We have encountered many difficulties, to be sure, and I suspect my colleagues in other institutions have troubles of their own; but I am confident that, if the plan which I have

outlined is one that should succeed, it can be worked out successfully in many places. It is a work, however, that demands our united efforts. And in this connection I desire to say that I can find no evidence of that self-righteousness so naïvely imputed to university professors of education by the Committee of Fifteen, when it was remarked that "it is not necessary to enter in detail into the work of theoretical instruction for secondary teachers. The able men at the head of institutions and departments designed for such work neither need nor desire advice upon this matter." My opinion is that these men will welcome the advice and support of this organization, and that in turn they will render you invaluable assistance in your professional labors, if you will let them understand your needs. Let us strive together for the upbuilding of that more excellent educational state in which each shall do his part and do it well.

DISCUSSION

JOSEPH S. STEWART, president North Georgia Agricultural College.—The question under consideration has been so ably discussed by the gentleman who has just taken his seat, and at a former meeting of the National Educational Association, in the comprehensive report by Dr. Tarbell, that there seems little more to be said upon the subject. There are a few remarks that I wish to make as specially touching the educational qualification of teachers in the South.

The large majority of our successful secondary teachers are young men from our colleges, who have served an apprenticeship in the rural or village schools, and have risen to high-school positions. Few of them are from our normal schools, as these have failed to furnish the proper scholastic advantages, or are of recent origin. Some of them have taken postgraduate courses in the northern universities and normal colleges. The large majority "have struggled upward through the night," with the aid of educational journals and the study at home of the best books on teaching. Thus has grown up in the South a body of young schoolmen who are thoroly in earnest, and are meeting the educational problems that present themselves with all the devotion and enthusiasm, if with less of the philosophical and scientific acumen, of some of their brethren who live beyond where Mason and Dixon's line used to be. If they cannot discuss with Drs. De Garmo and McMurry all the mysteries of Herbartianism, they are, nevertheless, equally in earnest in "manufacturing men," as Ruskin used to say.

There are still too few who make teaching a profession, their life-study and -work; and there is too little appreciation of what should be the preparation for this work.

There is a very strong sentiment in the South, especially among college presidents and professors, that the only training or preparation necessary for a teacher is a college A.B. course. Armed with this diploma and a letter of recommendation from the president, the young graduate leaves his alma mater qualified to fill any position in the gift of trustees. I have in mind now a college president, prominent in his church, who hoots at all these books on teaching, having read but one, and boldly declares that if a man knows his subject he can teach it. He does not hesitate to recommend for the superintendency of a city system, the principalship of a city high school, or even a professorship in a college, the graduates of last year's class. With him and his followers — and there are many — a college diploma is the *sine qua non* of a teacher's qualifications. It has both pained

and amused me to watch, at times, the flounderings of these young graduates. They remind me of the fabled ride of Phaeton:

> Thus young A. B., among the nation's young,
> Leaped in the teacher's chair and seized the reins,
> Far from their course impelled the glowing youth,
> Till nature's laws to wild disorder run.

The history of thousands of failures attest the inadequacy of an A.B. course alone as preparatory for teaching. The failures and misfortunes attending their first positions doubtless have driven many bright young men into other professions. When will our people learn that something more is needed than a college course?

The normal schools of the South, with the exception of Peabody Normal, at Nashville, under Dr. Payne, offer courses so meager, being little more than high-school studies, that few of their graduates are qualified in scholarship for positions in our best high schools, tho they may have an overabundance of teaching machinery. They lack depth, "and because they have no root they wither away." Because of this lack of scholarship, because of this stressing of form to the partial neglect of the substance, the educated portion of the community often discredits normal training and associates it with shallowness. The normal schools "do not turn out men down our way," as Walt Whitman was fond of saying. They produce good grade teachers, men and women who teach well under supervision, but the leaders in educational thought and action today did not receive their education in our normal schools. The plan is too narrow, the ideal too low, in the main. Instead of a great, sound, whole-souled nature being cultivated, so that he may become what Dr. Canfield calls a "winner of men," the product is a specialist in primary- or secondary-school methods and scholarship, a fragment, a life narrowed and circumscribed with little hope of a wider field of action. The trouble is not in giving normal training, *per se*, for that is good; but it is in specializing too soon. The aim is not the realization of the rational self by a completely developed character, which can be obtained only by devoting ourselves to some large end in co-operation with others, or, as Schiller says, "One must either be a whole in himself, or join himself onto a whole;" but the ideal in these schools is to prepare the students to occupy, as soon as possible, a certain position in a school. The normal schools, as at present constituted, do not give the proper training for the secondary teacher, tho they are doing a valuable work for primary, grammar, and rural schools.

We have had little experience in the South in what can be accomplished by teachers' training classes as adjuncts to city-school systems. Some good grade teachers have been produced, but no definite work has been done in training teachers for the high-school positions. I do not care to see these classes for the latter purpose tried, as the product must be an inferior article.

Old Agricola, four hundred years ago, wrote to the authorities at Antwerp: "Take neither a theologian nor a so-called rhetorician, who thinks he is able to speak of everything without understanding anything of eloquence. Such people make in school the same figure, according to the Greek proverb, that a dog does in a bath. It is necessary to seek a man resembling the phœnix of Achilles, that is, who knows how to teach, to speak, and act at the same time."

The Froebels, the Arnolds, the Manns, the Mark Hopkins, the Harpers, the Harris's, the Whites, and a host of others that have been the inspiration of generations of youth, have been men of the broadest culture, men of active participation in the life of their times, men whose lives have been devoted to large ends. Nor did they leap at one bound into great positions as teachers. "A spark had stirred their clod." With resistless enthusiasm and unbounded love "they toiled while their companions slept."

Dr. Jordan, in his *Science Sketches*, tells us that the school of all schools which has had most influence on scientific teaching in America was held in an old barn, on an

uninhabited island, some eighteen miles from shore. It lasted but three months, and, in effect, it had but one teacher — Agassiz.

I would have the man who is to teach my boy in that vital period of adolescence the most cultured that the college or university, supplemented by travel, could produce; one with a comprehensive knowledge of the history and philosophy of education; a man of the school, and yet a man of the world; a student, but not an ascetic; a thinker, yet a doer; young he may be, if he has a big heart and a glowing enthusiasm; one who in the process of his development is a secondary teacher today, but ready to be called to the principalship tomorrow, and yet higher and higher as he grows; one who thinks character the greatest thing in the world, and lives to know and realize the truth. Such teachers are not trained imitators. They have caught the divine truth from some great soul, and live their creed thruout all time.

I would not spend much time, therefore, in training secondary teachers, but I would that more of our bright young men would set before them the ideal of a great teacher and turn all "the current of their lives" to realize it —

> "Filling the soul with sentiments august,
> The beautiful, the brave, the holy and the just."

Merely trained teachers are like trained horses, or birds, or servants — good enough where someone else does the thinking. We need an emancipation proclamation to deliver us from machine work.

The best of our colleges and universities give the breadth and culture needed by the teacher, supplemented by courses as offered in the chairs of pedagogy like those at Chicago, Columbia, and the best of our normal colleges. If our colleges would offer a degree of bachelor of instruction, based on a regular four-years' course, but substituting for Greek, say, after the sophomore year, a course in the history, philosophy, and science of teaching, many young would go out prepared to succeed as teachers where only failure now awaits them.

I cannot close this discussion better than by saying, after the manner of Milton, that he who would hope to develop strong, well-rounded characters ought himself to be a true man, a great poem, not presuming to teach the young the way of truth unless he have in himself the experience and the practice of all that which is praiseworthy.

EFFICIENT AND INEFFICIENT TEACHERS

BY F. LOUIS SOLDAN, SUPERINTENDENT OF SCHOOLS, ST. LOUIS, MO.

"The welfare of the child shall be the highest law," is the principle on which every school should be conducted. To it all other considerations must yield. The wisdom of school laws, the merits of school officials, the efficiency of teachers may ultimately be judged by the way in which the interests of the children are affected by them.

PARENTAL DUTIES

The right of the teacher to control and discipline the pupils is a delegated one. Her authority is derived from the fact that she stands in the parents' place.

The assumption of parental rights by the teacher cannot be separated

from obligations which resemble those of the parent. Kindness to and sympathy with her pupils are qualifications just as necessary in a teacher as the ability to impart instruction.

Little children are mischievous and naughty, and it is necessary at times to enforce respect to law by strict disciplinary measures; yet there should be sympathy even in punishment, lest it fail of its purpose and arouse passions in the child soul which had better forever be dormant.

There are unlovable children, seemingly irresponsive to word and act of kindness, with whom it may be difficult to remain in sympathetic touch. But, for all that, the teacher who does not love childhood, in spite of its mischief and naughtiness, its apparent slowness or dullness in lessons, who does not enjoy, in a measure, even the vagaries of childhood, has erred in choosing her vocation. The presence of a nagging, scolding, morose, fault-finding, or habitually discontented teacher or principal is a calamity to a school and a misfortune to a school system. A wise teacher makes the child's sojourn in her room both profitable and pleasurable.

The teacher adjusts herself to the ways of childhood in order that the child may adjust himself quickly and willingly to the demands of education. Her vocation requires a constant compromise with the natural frailty and the infirmities of child nature, but there must be no compromise whatever in regard to the great and exacting aims of the schoolroom work, the teaching of the good and true, or, in other words, in regard to valid and lasting results in discipline and instruction.

PROFESSIONAL PROGRESSIVENESS

The school time of many children is limited to two or three years, and every moment of their time should be utilized to best advantage. Constant self-improvement and growth on the part of the teacher are, therefore, conditions of professional excellence. The regular reading of some good educational magazine, the study of good educational and general literature, the use of the public library, a fair participation in educational meetings, utilization of whatever opportunities of general, literary, scientific, æsthetic, or ethical culture the city or place offers, are obligations which the profession impliedly requires from every conscientious teacher. The least educational fitness which childhood can demand is that its teacher should be a live man or woman. The "personal equation" is of special importance in teaching, where much of the influence exerted over the child is by example rather than precept. Strong manhood or womanhood is required to make a good teacher. Character and the personal habits of neatness, good taste, social and ethical refinement are as essential qualifications in teaching as physical health, and good hearing and eyesight.

In regard to instruction, the duty is to secure for the lessons the most potent educational influence on the development of character and mental

power. An efficient teacher will see that the lesson is not a "re-citation," a term derived from the obsolete period in our educational history when the work of the school consisted in assigning pages in text-books and requiring that the words should be committed and "re-cited" verbatim. A lesson should not be a mere re-citation on the part of the child; it should rather be a thoughtful statement of the contents than the recital or repetition of an author's words. In conducting the lesson she has no thought of using it to display her own professional skill or brilliancy; but she puts the child in the foreground, and her whole aim is to give to his own acting as much time and scope as her skill can induce him to use. She speaks little, that he may speak more; she realizes the difference between telling and teaching. Her aim is to excite to activity, and for this purpose she enlists his interest. She makes instruction, not only profitable, but also attractive. She not only serves the intellectual food, but also stimulates the appetite.

ORDER

The child is to become a law-abiding and order-loving citizen, and the schoolroom gives him the first training by intercourse with his equals in communal life. He learns to obey the law, to respect the rights of others, and to regulate his conduct by altruistic considerations. He must learn to so adjust his conduct as to afford the other children the best opportunity for their work, thru his silence, his application to duty, and obedience to direction.

TEACHER AND PARENT

The teacher's authority has its source in that of the parent. As she respects her own position, she will respect that of the child's father and mother, and whatever she can do to increase the appreciation of parental care and guidance will help her to maintain her own authority. It is ill-advised for the parent to speak derogatorily of the teacher in the presence of the child; it is a professional error for the teacher not to manifest good-will and respect for the parent at every opportunity.

There is no relation in the whole range of social life where the presupposition and need of co-operation is more natural and more imperative than in the case of the parent and teacher. It is clearly one of the professional duties of the teacher to strive to remain in harmony and friendly touch with the pupil's home. Teacher and parent impair their educational efforts by failing to maintain good terms and touch with each other.

While co-operation between school and home is desirable, no unnecessary demand for assistance should be made upon the latter, and the legitimate share of the work must be borne by the teacher, without worrying

and nagging the parent with constant complaints about petty matters which belong to the legitimate duties of the school, and which a competent teacher should be able to set right without troubling others unnecessarily for assistance.

There is no parent who will not appreciate the faithful efforts of a teacher in behalf of his child. A teacher who understands how to make her room popular, by devotion to the children and good nature in dealing with parents, renders a service to the cause of public education. A teacher who gets into trouble with parents habitually and establishes a general reputation of unfriendliness had better indulge in a process of self-examination and reform. No teacher should forget that a parent's life is as full of trials as her own, and that the experience with a troublesome child is likely to be as irritating at home as it is in school.

RELATIONS WITH OTHER TEACHERS

The maintenance of a system of public schools is the best safeguard of the welfare and interests of the child.

Belief in the public schools as a system involves the willing acceptance by each teacher of the conditions on which it rests, namely, willing and helpful co-operation with other persons employed in the same work. Each teacher must adjust her individuality to efficient service with fellow-teachers and co-workers. Where masses devote their lives to joint labor for a common purpose, subordination, self-discipline, and active loyalty become essential duties. Without this there can be no concentration of efforts, no wise husbanding of means, no control, no unity of purpose, no efficient maintenance of education on a large scale.

One of the qualifications required of the public-school teacher is her fitness for co-operative work. This means the ability to get along pleasantly with fellow-teachers, with principal, parent, and school officials, and to labor in close and helpful harmony with them.

A proper regard for the professional reputation of others, or of the public schools at large, seems to be a self-evident duty. No personal advantage can be gained by the flippant and sweeping condemnation of the work and qualifications of other teachers or schools.

There is no worse piece of folly than that of which instances, fortunately rare, are found in many places, from the primary room to the university — than the fatuous complaints about the alleged poor instruction which the children have found in the grades below their present one. Sometimes a university complains about the derelictions and inadequacies of high-school instruction, the high school about the grammar schools, and in the latter, room No. 1 complains about No. 2, and so down to the primary room, which, perhaps, is so fortunately placed that it has a kindergarten preceding it, about whose derelictions it can complain.

DUTIES OF PRINCIPALS

There is no more important office in our whole school organization than that of the principal. Our whole system in its daily working is based on the idea that the principal is the one in whom the highest local authority is vested. Great authority is connected with duties correspondingly great.

PRINCIPAL AND COMMUNITY

Every principal should endeavor to make his school a favorite with the people, which is the natural position for any public school to occupy. Our people believe in public education and cherish it. Where a school is not popular, the probable reason is usually some mistake of omission or commission in its management.

The best and most direct way to make a school popular is to make it efficient in instruction and discipline. Efforts in this direction are sure to find their reward in public appreciation. If, in addition to this, a principal makes it the rule of his own and the teachers' management to cultivate pleasant relations with parents, it will certainly lead to that kind of popularity which is desirable.

This does not at all mean that the principal should allow his school to become lax in discipline, or that he should be irresolute in dealing with refractory pupils, or should be accommodating and time-serving when unreasonable demands are made on him ; politic weakness is sure to result in loss of public confidence and respect. A weak man or woman cannot be an efficient principal. Our people do not wish that bad boys should grow up uncorrected. What is required of the principal is strict attention to his business, a certain kindliness of disposition toward children and parents, and the manifest wish to satisfy just demands.

RELATIVE IMPORTANCE OF DUTIES

The amount of routine business which the principal of a large school is called upon to attend to in the course of a day is exceedingly laborious. Yet it would be a great error for a principal to lose himself in details, which, after all, are of secondary importance, compared with the great duty of being the leader and guide of the teachers and children. To distinguish well between what is important and what is unimportant in his duties is a test of a principal's good judgment.

PRINCIPAL AND TEACHERS

Participation in the same work may be made a source of mutual improvement for principal and teachers, if they are willing to profit by the opportunity. Every principal must educate his corps of teachers, and it may be said, without fear of contradiction, that he in turn is educated by them thru the work and methods he observes in their rooms.

The professional conversations with teachers, if properly managed, may be a source of reciprocal training. There can be no better pedagogical schooling than to be compelled to find valid educational reasons for every method of teaching and every problem of discipline.

Teachers' meetings, in the second place, hold an important position in harmonizing and unifying the work, and no school should be without them. Teachers' meetings are always useful, but their measure of success depends largely on the tact of the teachers and the personal qualities of the principal. They tend to establish spiritual touch and community of intellectual life among the members of the corps.

QUALIFICATIONS OF PRINCIPALS

The principal holds his office by appointment of the board of education; but this appointment is ultimately based on the supposition of superior scholarly attainments, pedagogical skill, and executive ability. These qualities should be just as much in permanent evidence, as conditions on which the principal's authority rests, as his annual reappointment. The principal's authority, in a higher sense, can be maintained best by constant self-improvement, reading, and study; without these, scholarly qualifications soon become obsolete.

In qualifications confined to routine ability there is not a sufficient element of progress. There is good teaching done elsewhere, and the child has a right to demand that his leader, on whom his education depends, should be informed of the best work and thought current in educational literature and practice. He should be able, when occasion arises, to give good pedagogical reasons for his practical directions, more valid than "I think so," or, "This is the way in which I think it ought to be done."

Official authority supported by personal qualifications constitute the most efficient kind of leadership, and will easily find responsive following.

The principal is answerable for the condition of his school, and for this reason it is his duty to speak to a teacher frankly when he discovers errors in her instruction or management, and to make suggestions whenever he sees that they are in the interest of the children.

This task need not be, and will not be, unpleasant, unless principal or teacher makes it so; the former by inconsiderate manner in making a criticism, and the latter by unbusinesslike sensitiveness in receiving it. It is a great mistake ever to make criticism the outcome of a fit of anger or passion. Criticisms are part of a teacher's official business, and must not be made an indignity by the way in which they are given or received.

While the principal is the absolute judge of all arrangements in his school, there is no need of having the whole work conducted on the dead level of uniformity. To deprive teachers of the freedom of movement

means to deprive them of self-confidence, and to sap individuality, which is the main source of vigorous and progressive teaching.

Cases of absolute inefficiency cannot be tolerated in a school where the interest of the child is the highest law. In this class must be included all those cases of inefficiency where the possible cure is so slow and uncertain that the children would suffer by the attempt.

There are physical as well as ethical defects which no training, no patience, on the part of the principal, no help extended, no frankness of criticism, can change, or even mitigate.

Where old age is accompanied by a decline of power that prevents the competent performance of essential duties, it may necessitate the resignation of a teacher whose long and valued service in the public schools makes everybody regret that she finds such a course necessary; but, on the other hand, the children's interest must be guarded, and there seems to be no other recourse.

A kind of absolute inefficiency which does not have the claim on sympathy that is due to old age or physical ailment is the habitual morose disposition that leads to unkind and unsympathetic treatment of the children. Objectionable habits of life, or qualities of character and disposition that set a bad example to childhood, must also be enumerated among the conditions that constitute absolute inefficiency. A lack of natural talent to impart knowledge, or the inability to control children, which time, experience, and assistance do not seem speedily to improve, must also be considered as elements of absolute inefficiency. The school can tolerate relative inefficiency in such cases only where there is the probability of speedy and permanent improvement. Inefficiency may result from absence of ordinary business capacity, such as the ability to be prompt and regular in attendance, and in school work and records; but these business qualities are largely matters of habit, and may be acquired whenever there is a modicum of talent and earnestness of purpose. There are also absolute demands which the interests of the public schools as an organization impose: willing co-operation with others, and ready subordination to constituted authority.

In all cases of absolute inefficiency an obligatory and speedy change of vocation is the proper remedy.

If the preceding discussion of the teacher's duties has served any purpose, it must have shown that the teacher's duties are exceedingly numerous, and that there is no one who can possibly attain absolute perfection in all directions of professional work. There is no teacher living who does not fall short of perfection in some way, and who is not less efficient in certain directions than in others. There never has been a system of schools, and there never will be one, that is not taught by teachers differing in talent and in degrees of efficiency in various directions.

Even with the best teacher, one day's work is not always as efficient

and satisfactory as another's; in years of efficiency there are always days of relative inefficiency when, in the dealing with pupils or in the presentation of topics of instruction, the teacher herself is severely dissatisfied with her work. This consideration suggests that it would be unwise to judge a teacher's work adversely on the sole basis of a single or an occasional visit to her room.

A young teacher's professional immaturity may make her work seem inefficient compared with the work of one that is more experienced.

Even after the most careful preparation, thru high- and normal-school work, it requires three or four years of experience in the schoolroom to develop in a young teacher the highest degree of efficiency which it is possible for her to attain.

In a system of schools there is always some young teacher less skilled, less experienced and efficient than others. As long as she is manifestly growing and profiting by her daily experience in the schoolroom, makes use of suggestions for improvement, and is doing fairly efficient work, which is better today than it was yesterday, there is no remedy but the influence of time and training. It would be useless for school authorities to attempt to eliminate relative inefficiency by removal from office, unless the position can be filled by someone better qualified.

The question as to efficiency of teachers is always an important one in large systems of schools. "What shall be done with inefficient teachers? How can we discover their presence?" is the question which every school board will ask. An answer has been attempted in the preceding discussion. Absolute inefficiency can be neither cured nor endured by a school system. It must be eliminated by filling the position with a better-qualified teacher. Relative inefficiency, that is to say, temporarily unsatisfactory work, may be changed by training and experience to efficiency. Not a few of our principals, year after year, when it happens that a teacher ranking somewhat below the average in ability is assigned to their schools, succeed, after a comparatively short time, in making such teacher efficient, thru the influence of their personality, and the help and guidance which they give. Principals render one of the most important services if they successfully educate their corps and help the weaker teacher to attain efficiency thru their influence and supervision.

It is an imperative duty, but by no means an easy one, for boards of education, principals, and superintendents to eliminate cases of absolute inefficiency. The person chiefly concerned is hardly in a condition to realize that she is inefficient. She honestly does not believe that her work is bad, and cannot understand why others should think so. If she could realize her inefficiency, it would probably not have existed for so long a time. In not a few cases inefficiency goes with a fixed conviction of personal excellence; the consciousness of having made the best effort that she is capable of blinds the one reported for inefficiency to the fact

that even the best effort may be inadequate where nature has withheld the talent requisite for the instruction or control of children. To the person chiefly concerned the trouble is somebody else's fault rather than her own; it is due to some petty misunderstanding in the past, to social or religious bias, to jealousy, if it is not dictated by fancied petty animosity or is the result of an old grudge. As a rule in such cases, the plea is that of injustice on the part of the reporting officer, of prejudice, or hasty judgment, or insufficient information; it is alleged that the room has not been visited often enough by the principal or supervisors, or that their visits did not occur at the right time, and that the teacher has not had enough help, and has not been informed with sufficient frequency of the defects of her teaching. In cases of radical inefficiency the reporting principal finds himself, as a rule, in the most unpleasant position of being charged with injustice to one that depends on her work for a living. Every unfortunately incompetent teacher has a circle of friends who know her estimable social qualities, but not her professional shortcomings, and who do not realize the great injury which her presence in the school causes, since they naturally accept her valuation of herself as correct.

Nature and heredity have gifted woman with the ability to lead and teach children. If sufficient care in the education and appointment of young teachers is taken, and if sufficient help is given to those that need it, the number of teachers who are found disqualified to hold their positions should always be very small.

THE TEACHER'S TENURE OF OFFICE

Frequent changes in teachers would affect the continuity of the work of instruction, and are therefore not in the interest of the children. The teacher's tenure of office should be safe and depend on efficient work, and in no way on political contingency or social influence. This is a demand which every friend of good government and efficient education will make.

A teacher should be able to give her whole mind to the children, without being worried constantly by thoughts of loss of position thru some occult influence and thru no fault of hers.

DISCUSSION

R. K. BUEHRLE, city superintendent, Lancaster, Pa.— It might be well to consider the result of our education, as it shows itself in subsequent life. It is said that, as civilization advances, the tendency to suicide increases. It is also true that greater care is taken to make life pleasant and easy for the children. May not this shielding of childhood from exertion and hardship be the cause why men fly to death when hardships in life overtake them, seeing they have not learned to endure? Why not steel the will to

overcome difficulties rather than remove the difficulties out of their path? Why not strengthen the youth to endure and thus to acquire fortitude, and hope, and faith, which will not make ashamed, nor lure to suicide — the coward's refuge from impending evil? Look at the youth from the Military Academy at West Point and the Naval Academy at Annapolis! Rigid examinations and severity of discipline inure the graduates from these institutions to undergo hardships, and how proud of their record we all are! Make the pupils of the public schools strong rather than their course easy and soft. So, too, life in the country has generally more of toil and hardship for the boys and girls, and it is no doubt because of this experience that the boys from the farm become the most successful business-men in our cities. I repeat: Make the pupils strong by confronting them with difficulties to be overcome.

J. W. CARR, superintendent of schools, Anderson, Ind.— The plan advocated by the gentleman from Pennsylvania provides for the education of the few, not the many. If we are to have an aristocracy of learning, I should be in favor of the West Point system — a system which selects only the best of the best. But if we are to have a democracy of learning in America, we must have a course of study and a system of promotion that will most nearly meet the needs of all the people.

CHARLES W. DEANE, superintendent of schools, Bridgeport, Conn.—Let us come back, if you please, to the question of the efficiency or inefficiency of teachers. Notwithstanding what has been said, I am inclined to think that, if Raphael had been without arms and legs, he would still have been just as great a painter as he was. The painter's soul within him would have supplied the means of expression. We think that we can make teachers; so we spend our energies in equipping them with means of expression ofttimes when there is little within that is seeking to express itself. How often do we see teachers expending all their powers on the simple details of a single grade of work! Think of a human soul cramping itself within such narrow limits! I counsel my teachers, rather, to pursue lines of study outside of their immediate school subjects — one line this year, another line next year — that the teaching soul may be enriched and broadened. Get the teachers out of these narrow grooves of grade work, and give them more extended views of knowledge and of education, and the simple details of method can be readily furnished and will be more intelligently applied.

WHAT THE SUPERINTENDENT IS NOT

BY A. E. WINSHIP, EDITOR OF "JOURNAL OF EDUCATION," BOSTON, MASS.

What are you here for? What is the superintendent for? Is there any other country that has such a body of officials? They have inspectors, examiners, ministers of education, but where is there a superintendent beyond our own borders? Is it a superstition that we must supersede the teacher with a supereminent person, a superintendent to supervise his work?

It is altogether probable that this word "superintendent" has come from superintender, applied originally to the Almighty, the super-tender, hence superintender, of man's moral being thru supreme laws. It is modest, to say the least, to appropriate this term, arrogating to yourselves

the function of superintending the morals of mankind thru the rules or regulations emanating from your office.

It is my lot to hint at what you are by suggesting what you are not. You are not supernumeraries. There have been times when the office was merely an extra, where the man was simply a supernumerary; where he did nothing that was not as well done before, and would not have been as well done at the time without him as with him. There is no excuse in the world for a superintendent unless he secures, directly or indirectly, better work for the money invested than would be secured without him.

You are not a superannuated official. When supervision was first proposed, there was earnest and honest objection to it, on the ground that it would merely make places for superannuated men who had outlived their years of usefulness—clergymen, lawyers, and politicians. Forewarned was forearmed, and few superannuates appeared; none should be in this place demanding superlative activities of super-eminent men and women.

You are not super-critics. There have been officials in days gone by who thought their chief function was to be hypercritical. Nothing kills a school so quickly and completely as a hypercritical teacher, and nothing places a teacher beyond the hope of resurrection so surely as a hypercritical supervisor. Hypercriticism destroys genius, dulls brightness, enervates power, and saps all life. It is professional vivisection. Hypercriticism reduces virtue to the technical observance of the senseless rules.

You are not supercilious. A dictatorial, overbearing, arrogant official can get on better and be more useful anywhere on earth than he can in this office. Patience without proscrastination, friendliness and firmness, approachableness without familiarity, are indispensable to success.

You are not superficial. If there be one position above all others in which shallowness is absolutely unbearable, it is in this. In many positions one may trust to luck, may hope that only light-draft craft will come his way; but here, where a man must deal with an ever-changing school board, a fickle public, a variety of teachers of differing degrees of tact and talent, hundreds or thousands of children with an infinite array of human nature, he must have a deep mind and broad experience to furnish a channel for all the conditions that are liable to pass one another without signaling their approach.

You are not merely a supercargo. A merchant ship needs an extra manager to care for the commercial affairs of the vessel, and he is styled the supercargo. The first condition that prompts a school board to select a superintendent is the fact that the commercial details of free text-books, free pens, pencils, and paper, and other routine work, become unbearable to the non-salaried official. It is possible that we should never have had this office, in the popular sense, if school boards had not needed an errand boy. The principal could not be spared to attend to these things, and

so they selected a supercargo for books, merchandise, wood, coal, and broken clothes hooks.

It has been a great surprise to the original employers of superintendents, themselves long since shelved by a thoughtless constituency, to see how little these errand boys understood their place, and how quickly they did not keep it. Cæsar never surprised his creators more than have these modern Cæsars. It does not take a school board a great while to appreciate the changed conditions when it runs up against a man like President Andrews. The other fellows are the errand boys now. The superintendent in a large city has a supercargo of his own.

You are the only superintendents in the original sense — superintenders of the moral, intellectual, and physical well-being of the nation, thru the children under your charge, and this by means of rules and regulations, instruction and inspiration.

The term has been misapplied to overseers of mills and factories, railroads and prisons. These men cannot be superintenders. They deal only with material and mechanical matters, with mercenary interests and criminals. It is left to you to be the only true superintendents, superintenders of the moral well-being of the universe.

To make the matter clear from a different standpoint, let us change the figure, apply a new name — conductor. You are the conductor, not the engineer, who merely watches the track and whistles, puts on steam or brakes as he is signaled by sign posts, the warning red light, or the conductor's tug at the cord. You are not the baggagemaster, who takes on and puts off crayons and erasers according to the directions of the board. You are not the train hand, who calls out stations and passes the water; in other words, there is something for you to do other than ring in rainy-day signals, assign substitutes, and provide teachers' meetings.

You are not the newsboy, to furnish sensational journals, dime magazines, and cheap stories, varying these with smelling salts and chewing gum. In other words, you are not the professional gossip of the department of education.

You are the conductor. By this it is not to be inferred that it is your chief business to put the tramps off the train or to collect the fare. You are to collect the fair, and the fairer they are the better; but your chief business is to be responsible for your train, for its starting on time, running on time, coming in on time.

Your watch is the only standard on that train. Your word alone is law; by the mere movement of your hand every official is guided. The president of the road is a mere passenger on your train. The school system of the town, city, county, state, and nation is to be conducted into the great union station of this imperial nation by the men and women of this department.

HOW TO MAKE GOOD TEACHERS OUT OF POOR ONES

BY W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION, WASHINGTON, D. C.

The most important work of the school superintendent is indicated by the heading of this paper: "How to Make Good Teachers Out of Poor Ones." I desire to point out some directions in which such desirable work is not only possible, but quite fruitful.

When I began my career as a teacher, many years ago, I was led to believe that training and experience could do very little for the improvement of a poor teacher. Afterward, when I left the work of personally conducting a school and became a school superintendent, I commenced an experience full of opportunity to observe cases of improvement in the art of teaching, and rich in ways and methods of effecting such improvement.

Before I became superintendent I had noticed two methods, which I defined loosely as follows: The teacher should think out all the successive steps of the day's work in advance, either the previous evening or else early in the morning before school. Whatever should happen, he should be prepared to know what to do next. Nothing is so effective in holding a school in hand as to show perfect readiness to meet an emergency. If the teacher needs time to think out his work in the presence of his pupils, he loses his prestige in the school. The pupils do not reflect on it, but they feel at once the limitations of their teacher and break away from his hold. If the teacher is perfectly prepared when the unusual happens, even the unruly pupil is disconcerted and finds himself limited by a larger will and a larger intellect than his own. His refractory spirit is subdued.

I learned at the same time that the pupils must be led and not driven, pulled and not pushed, by the successful teacher. "A man may lead his horse to water, but cannot make him drink," says an old proverb. The teacher should, therefore, set such tasks as will fully occupy the time of his pupils, and he must hold them responsible for their accomplishment. These will act as a kind of hypnotic suggestion, leading the pupils to work instead of play. Then there will be little mischief developed in his school. If he undertakes to suppress mischief by an exertion of outside force, and neglects to preoccupy the mind of the pupil with work that he can do, he will find that he is taking on himself the entire weight of responsibility and is engaged in lifting the entire school, without any assistance from the pupils themselves, not to say against their positive resistance.

Therefore I observed that those teachers were most successful who

kept tasks ahead of their pupils, tasks so measured to their degrees of capacity as to secure their interest and cheerful endeavors.

When I became a superintendent I discovered that there existed a variety of devices possible to the head of a school system that were not available for a principal of a school.

The first of these devices I will name "substitute" work. There will be a certain amount of absence on the part of teachers. Perhaps it may reach, in a city, as large an amount as 3, or even 5, per cent. of the entire corps of teachers. The central office being notified. the superintendent or his clerk sends out a substitute; he has a list of new teachers who are waiting for a vacancy, or he has a class of new graduates from the normal school ready for appointment.

The substitute goes to the school, fills the place of the absent teacher until her return, say for a day or two, or longer. She brings back from the principal of the school a brief report of her work, pointing out strong or weak points.

Every superintendent knows that substituting is hard work. The school is an organized society that must be met and taken in hand by the novice teacher. If she conquers at once, she shows great power. If she is able to gain her hold of the school gradually, she is accounted successful. But it usually happens that a failure to control the pupils in the first half hour leads to a more and more dismal failure as the day goes on, and a thoro defeat on the first day is not to be followed by a victory on the second day. It is the good fortune of the substitute that the regular teacher comes back on the second day, and she reports to the superintendent before she has become completely discouraged and humiliated by the rebellious children who have proved too much for her skill.

Another and another brief experience succeeds, and the substitute gains a store of wisdom as to the best devices to use for the control of a school. She learns just how to lead rather than to drive, to pull rather than to push. She becomes what is called a ready disciplinarian, and can get work from all her pupils without harsh measures and without appealing to improper motives of any kind. So useful is this practice of substituting as a training for new and inexperienced teachers that the superintendent has been persuaded to try it for regular teachers who have for a long time been poor in discipline or in instruction. He asks his school committee to place such on the substitute list, not to dismiss them altogether.

I have known many weak teachers made efficient by such an experiment. A day here and a day there, and a constant effort to be equal to the work required, succeeded in developing new resources, and the teachers who had belonged to the list of chronic failures pressed over to the list of the permanently successful.

There is in the power of the superintendent another device which may

sometimes improve a school very much by removing a cause of failure. Some pupils are unmanageable under one teacher who make no trouble if transferred to another. Take such pupils away from their school and send them to a school in another district, and in nineteen cases out of twenty they give no more trouble. The causes for this cure are many. In the first place, the bad pupil has to adjust himself to a new society of fellow-pupils, and this necessity of readjustment uses up his surplus nervous energy, so that he cannot yet begin his struggle with the teacher, and he therefore at once surrenders to the new teacher. Then the chances are in favor of his meeting in the new teacher a different temperament, a personality that attracts him, while the former teacher repelled him. Then, again, his parents hold him responsible and watch his conduct, while in the former school they had sympathized with his efforts against the teacher and had justified his conduct by accusing the teacher of partiality. With a new teacher the parents are not ready to use the plea of partiality at first. At home they will question with some impatience and some sternness the first complaints that come to them regarding the transferred pupil's conduct. He will be made to feel that he is under some suspicion, and that he is held responsible to a greater degree than before for the collisions made by him at school.

I have estimated the number of pupils who remain incorrigible after the first transfer to be one in twenty. The second transfer thins out the incorrigible remnant, and reduces it perhaps to one in a hundred of the original list of unmanageable pupils. But I have known a few cases in which it required five, or even six, transfers to secure the desired result. Some of them were very pathetic. The parents were somewhat hysterical, and it was very difficult to persuade them to look at things in a reasonable manner. The superintendent, however, who has learned how to use this device of transfer never allows the parent to discover in him the slightest trace of impatience. The parent comes on his second visit to the office with a little shamefacedness, or perhaps a little touch of defiance, and the superintendent greets him with some expression of encouragement: "You must not get impatient with your son. We must work in concert and continue our efforts until we get James rightly placed. I see that he has a somewhat brittle temper, and we all know that the brittle-tempered boys who learn to control themselves make the best business-men." The parent is much helped by a suggestion like this, and begins to take the attitude of a rational man seeking the true good of his child. I said that the superintendent must never allow himself to show impatience; I meant that he must never allow himself to feel the slightest impatience, and he must make the parent see his freedom from bias. I remember a case in which a pupil was transferred six times before he found a teacher who could control him and get good work out of him. I confess that I thought that his brittle temper would never get sufficiently annealed to make a

success of him in life, but many years after I left the superintendency I met one day in the streets of a city the father of the boy. He stopped me and shook hands with me cordially, saying with great pleasure visible in his eyes: "You remember my son with whom we had so much trouble?" I assented, and he went on eagerly to say: "That boy has become a first-class business-man, and is at the head of a great store in ——" (he named here one of the most enterprising of the western cities). I congratulated him heartily, and I was thankful that my policy of managing such cases had, after all, proved equal to the needs of this individual.

I have said above that this plan of transfers, judiciously used, will, in fact, effectually cure 95 per cent. of the cases that have proved incorrigible in any given school. I think that the plan followed up to the fifth or sixth transfer, if need be, will cure all of the cases, especially if some other devices are connected with it, one of which I will describe. If a boy is very difficult to manage, it is best always in the transfer to ask the second teacher to suspend the pupil at once on the first appearance of rebellion. The possibility of this prompt suspension should be named to the parent also. This reduces to a minimum the bad effect upon the school which the retention of an incorrigible pupil is likely to have. The teacher is not required to use up his nervous energy by patient endurance of evil conduct, and the pupil is not given any opportunity to gratify his egoism by making himself into a hero.

There is still another device, which is almost as useful to the principal of a large school as to the superintendent. Inasmuch as the restored pupil is replaced in school only on probation, the superintendent may sometimes request of this pupil a line in writing from his teacher at the close of the day, stating the character of his conduct. He may bring this to the superintendent's office after school, and the superintendent can write a word of approval on the paper, if the conduct has been satisfactory. The principal of the school, instead of the superintendent, may require a pupil whose conduct is unsatisfactory to bring a report from the teacher in charge of the boy, at the close of the day, stating amendment or the reverse, and such reports on the part of these particular cases will often prevent the need of suspension from the school.

The suspension and transfer of pupils difficult to manage will develop poorer teachers into better ones by removing the cause of constant irritation. I have known corporal punishment diminished to one-tenth its former amount in a school system by transfer.

Another device by which the principals of schools may gain much power in this process of improving their assistant teachers is a series of weekly conferences with the superintendent, held at his office in the afternoon, the principal leaving his school in the middle of the afternoon session. A discussion of the practical and theoretical questions connected with the course of study and the discipline of the schools can be profitably

undertaken, and each principal will be able to contribute something from a recent experience to the settlement of difficult problems of management. All may gain thru the work of each.

I conceive it one of the most important duties of the superintendent that he organizes now and then a meeting of his teachers, in which some great production of literature or some work of art is discussed and the taste of his teachers improved. A course of reading may be organized in which the problems peculiar to education may be studied in their relation to broader principles, namely the principles of sociology. The teacher should be made to see how his work connects with the whole work of modern civilization, in giving the individual more power to help himself. The teacher should come to understand the structure of his civilization, and should learn to recognize all the other instrumentalities in his community and nation that work in the same direction with the school.

In short, the superintendent should improve the taste of his teachers and bring to bear their efforts for the bettering of the community in which the schools are situated. His poor teachers will become good ones in his effort to make his schools strong in the community.

AUTHORITY OF THE SCHOOL SUPERINTENDENT[1]

BY EMERSON E. WHITE, COLUMBUS, O.

The authority of a superintendent of schools may be considered from two standpoints, to-wit:

1. The authority which is inherent in the office.

2. The authority requisite for the highest efficiency in school administration.

The first question is best determined by a survey of the development or evolution (if this term be preferred) of the office of superintendent, i. e., historically.

The primitive public-school organization in a district was a school board or school committee invested by law with the organization, support, and direction of schools, each school being in charge of one teacher, as is now true in rural communities. The school board (or committee) determined the number and location of the several schools, provided houses, employed teachers, prescribed the branches of study and text-books, and, by general regulations and otherwise, supervised the management of the schools — so far as there was any supervision. But neither the board nor its members could exercise the teaching function. This belonged exclusively to the teachers employed, who, in virtue of

[1] By request of the author, the amended spellings adopted by the Board of Directors do not appear in this address. [See resolution of Board of Directors adopted at Los Angeles, July 13, 1899.]

their office, had certain *inherent* rights and authority — a fact too often overlooked.

The next step in the development of the public school was the putting of several schools into the same building, grading them, and making one of the teachers a head teacher or *principal*, with such general oversight and direction as were necessary to secure order and system in the joint occupancy of the building and grounds. The new office involved certain authority which, in the absence of its special delegation by board regulation or otherwise, was inherent in the function assigned. But the position of principal did not involve the right to supervise the work of the other teachers. Within his or her own room each teacher was free in methods of teaching, being responsible directly to the board of education for results. Whatever was done by the principal to increase the efficiency of the schools in his building was done indirectly and by the voluntary co-operation of the teachers.

The rapid growth of the graded system soon made another step of progress in school administration practicable. The increase in the number of schools in charge of a principal, in one building or in a group of buildings, made it important to commit to him the duty of grading and promoting pupils, usually under the direction of a committee of the board. This involved the determining of the attainments of pupils and incidentally some supervision of the instruction. This supervisory function, conferred either by regulation or common understanding, made it necessary for the principal to devote a portion of his time to supervisory duties. The office of principal was thus changed to that of *supervising principal.*

It is to be specially noted that the assigning of this supervisory duty to the principal did not in any way subvert or abridge the inherent rights of teachers. Each teacher was still free to teach according to his or her own judgment and conscience, being responsible only for results.

In the continued growth of the graded system it was an easy step from the office of supervising principal to that of supervisor or *superintendent*, a position in which the entire time of the incumbent was devoted to supervisory duties, the several school buildings being in charge of principals or supervising principals, as determined by the board of education.

This change from supervising principal to superintendent of schools gave the supervising officer little, if any, added authority, but greatly changed his position and duties. Instead of being a head teacher with close relation to the teaching corps, he became the executive officer of the school board for the discharge of assigned duties, and acting largely under the direction of the board and its committees. The superintendent's general duties were usually prescribed by regulations, but whatever authority was exercised in the discharge of these duties was largely

assumed, and properly assumed, as belonging to the supervisory function. It is true that these assumptions sometimes encroached upon the rights of teachers, and in some instances teachers were treated by unwise superintendents as their "agents" or as operatives. As a rule, however, superintendents were careful to recognize and respect the rightful authority of teachers. Improvements in methods of instruction and discipline were secured, not by imposing these methods on teachers, but by leading them to see their reasonableness and appreciate their practical value. The most efficient school superintendents in the country have not been dictators in school work, but advisors, instructors, inspirers, and leaders. Needed reforms have been secured through the intelligent and happy co-operation of the entire corps of teachers.

While superintendents and teachers were, in the early history of school administration, left free in the details of school work, boards of education kept in their own hands the employment and assignment of teachers, changes in the course of study, the selection of text-books and other teaching appliances, the purchase of school furniture and supplies, regulations for the classification and promotion of pupils, etc.; and all this with or without the superintendent's advice or assistance. Changes in these directions were secured only through the action of the board or its committees. It is, however, just to add that in these, as well as in other, directions superintendents have been increasingly regarded as the official advisors of the board, and their recommendations have received more and more consideration. Here and there superintendents have been recognized by boards, not only as official, but also as *expert* advisors in all matters pertaining to school organization, instruction, and discipline. Superintendents have thus been able to effect most important improvements in school administration.

Another important advance in school supervision has somewhat recently been effected, to-wit, the giving to the superintendent of the *initiative* in the selection and appointment of teachers, the revision of the course of study, the choice of teaching appliances, etc. In several instances this initiative has been conferred by statute, and in two or three large cities the superintendent's authority in some of these executive matters is not limited to the initiative, but is *final*—the last stage now reached in the evolution of the office of superintendent of schools.

We now pass to the consideration of the question: What supervisory authority is requisite for the highest efficiency in school administration? It is obvious that the answer to this question depends on conditions, such as the number of teachers employed, the intelligence of the community, its interest in good schools, etc. It certainly is not possible to give an answer of universal application.

Moreover, experience shows that all practical school policies have a historic root, and, as already seen, the historic American policy of school

administration vests the organization, support, and management of public schools in a school committee or board of education, representing the people. This is not only the historic, but the fundamental policy for the administration of American schools. The schools cannot part company with the principles of representative government. It would not be wise to commit their official administration to one person with a life tenure, however so competent. The efficiency of the schools depends too largely on the interest, appreciation, and support of the public, and especially of their patrons; and, to this end, the general management of public schools has been uniformly vested in officers, directly or indirectly representing the people.

It does not follow that the members of school boards should either individually or collectively attempt to discharge executive duties. They cannot assume the teaching function, nor can they wisely act as principals or supervisors. All experience shows that these pedagogic duties must be committed to persons competent to discharge them. This brings us back to the question: With what authority should the supervisory officer be clothed?

1. It is not worth while to stop long to consider the authority of principals, or even of supervising principals, in a system of schools. The authority most needed is largely inherent in the position, and does not need to be delegated or even defined. Besides, the relation of a principal to his associate teachers is so close and personal that desired results are best secured, not by the exercise of authority, but by the fruitful leadership of instruction, influence, and guidance. In all matters vested by law in the board of education, as the appointment of teachers, course of study, text-books, etc., the right of the supervising principal should be limited to recommendation or, what is usually better, to giving needed information. The position of supervising principal in large cities faces different conditions; and, if held responsible for the character of the instruction and discipline of the schools in his building, his advice as to teachers, teaching appliances, etc., should certainly receive due consideration. He should be given large freedom in administering the schools under his immediate oversight, provided always that the rights of the associate teachers be not unduly abridged.

2. The administration of public schools in small cities has its peculiar difficulties. The members of the board are in close touch with the schools and are jealous of their authority. They not infrequently assume the right as individuals to direct teachers in their duties, to review cases of discipline, etc., and all this under the assumption that they are clothed with supervisory power. If this erroneous assumption was always coupled with competency, the mischief done to the schools would not be so serious. The superintendent is too often regarded as the board's official agent for the discharge of assigned duties, and so he is expected "to run

the schools" under directions. As a consequence of this view, certain members of the board, acting as committees or otherwise, are zealous in their oversight of the superintendent. He supervises the schools; they supervise him!

It is unnecessary to say that the highest efficiency in school administration cannot be attained under such conditions. The superintendent should not only be the executive officer in all supervisory functions, but he should be the *eye* of the board, and its welcome adviser in all matters pertaining to instruction and discipline, the course of study, teaching appliances, etc. It should be not simply his right, but his duty to keep the board informed respecting needed changes in these directions, and his recommendations should receive respectful consideration. To supervisory duties should be added *responsibility* for the progress of the schools.

It is true that all this is now happily realized in scores of the smaller cities of the country. The superintendent is recognized as the responsible supervisory head of the schools, with the right and duty of being a leader in all wise movements for their improvement. This may be accepted as the *minimum status* of the office of superintendent of schools. It may be true that all superintendents are not equal to this responsibility. This is another way of saying that some superintendents of schools are not qualified for the position. Whatever his responsibility, the wise superintendent will recognize the rights of teachers to be as sacred as his own.

3. In cities containing from, say, 40,000 to 200,000 inhabitants the authority as well as the general duties of the superintendent of schools should be clearly defined by statute. The superintendent should have the *initiative* in the selection and assignment of teachers, the revision of the course of study, the choice of teaching appliances, etc., his action in these matters being subject to the approval of the board of education. This is increasingly the practice in the more progressive cities, this initiative being freely conceded by school boards. It ought to be made general by statute.

It is not claimed that all superintendents would use this initiative wisely, but it is believed that the putting of this responsibility squarely on the superintendent would greatly increase the efficiency of school administration and, as a consequence, the efficiency of the schools. It seems unnecessary to add that in all these duties the superintendent should confer freely with the assistant supervisors, principals, and teachers.

4. We now come to the administration of schools in large cities, a part of the difficult problem of municipal government. In a paper read in 1890 before the National Council of Education in St Paul, I advocated such a school organization in large cities as will separate the legislative

and executive functions of the school board, and further divide the executive function into two functions — to-wit, the business or financial, and the pedagogic or supervisory, the former to be intrusted to a business manager and the latter to the superintendent of instruction.[1] It was further urged that the superintendent should be vested by law with at least the *initiative* in the appointment and assignment of teachers. The position was criticised at the time as too radical, but, as shown above, the principle has since been embodied in the school laws of several cities.

It is no longer a serious question as to the wisdom of giving the superintendent of schools the initiative in the selection and appointment of teachers, provided his action is subject to the approval of the board of education. The unsettled question is: Should the superintendent's action in this matter be *final?*

It cannot be claimed that the superintendent's right to select and appoint teachers is a prerogative. In the absence of an express delegation of such authority to him, no superintendent can rightfully assume it. This authority is vested primarily in the board of education. The same is true of the determining of the course of study, the adoption of text-books, etc. I do not see the necessity or the wisdom of depriving the board of education of all responsibility in the appointment of assistant supervisors and teachers. So long as the board determines the number and classes of assistants and teachers to be employed, fixes and pays their salaries, it should have the right of *review* in their appointment; and whether this right be exercised in the form of approval or a veto is not important. But why a veto and not approval? While experience shows that boards of education in large cities cannot wisely take the initiative in the selection of teachers, it has no testimony against the submission of the superintendent's appointments to the board for its approval. It is believed that all needed safeguards against political action are provided when the superintendent and his advisers are given the full initiative — an initiative that is not limited by such petty and puerile legislation as forbids the appointment of married women or persons who reside outside of the city limits. The schools need the very best teachers that can be secured.

I must take the time to say, in closing, that no superintendent who has the appointment of teachers should be a member of the board of examiners that has the duty of licensing teachers. It seems an obvious principle in the civil service that the appointing power should not also make up the "eligible list" from which appointments are to be made. One of the safeguards against the abuse of the appointing power by school boards has been the fact that all appointments have been limited

[1] This plan of organization was ably presented by Dr. Hinsdale, of Michigan University, in 1888.

to persons holding a certificate of competency issued by an independent examining board. This has saved the schools from incompetent teachers —so far as they have been saved. It may be accepted as an axiom in civil-service policy that the appointing power should not also determine who may be candidates for appointment.

In all large cities the examining and certificating of teachers should be intrusted to a board of experts, at least three in number. When the superintendent has not the appointment of teachers, he may very properly be a member of this examining board. The weak point in school administration in most cities is the method of certificating teachers. The first safeguard against incompetent teachers in the schools is the competency of the persons on the "eligible list."

THE IMPLICATIONS AND APPLICATIONS OF THE PRINCIPLE OF SELF-ACTIVITY IN EDUCATION

BY ARNOLD TOMPKINS, PROFESSOR OF PEDAGOGY, UNIVERSITY OF ILLINOIS

The impressive lesson from the history of thought is that the human mind can find no peace except in search for the ultimate unity and reality of the universe. This unity, as discerned from afar by the eye of faith in religion, and established by reason in art, science, and philosophy, is the ultimate goal of man's earthly endeavor. All processes of thought, from sense-perception to reason, are but processes of establishing unity in and thru diversity, are but modes of satisfying the craving of the soul for touch with ultimate reality, with the life that binds the seemingly chaotic world into orderly system.

The teacher's world is no less a world of diversity to be ordered into the unity of a single life-principle. So many details and duties, even within the limits of a daily program! And when the entire scope of education is considered—its aim, processes, and instrumentalities—the whole to be unified is coextensive with the world of thought and reality. Here, as elsewhere, the desire for unity is the impulse to thought—for unity of the infinite diversity in the educative process. All educational discussions are based on the assumption and prompted by the faith that there is a unifying principle which organizes and systematizes the distracting variety of details in the process of education.

But, while in such discussions there is tacit recognition of the unity of the educative process, there is generally lacking the firm conviction that the complex process of education can be reduced to the unity of a single principle. Even Rosenkranz, in the introduction to his *Philosophy*

of Education, affirms that "the science of education cannot be deduced from a single principle with such strictness as logic, ethics, and like sciences," but that "it is rather a mixed science, having its presuppositions in many others;" and that "education is capable of no such exact definitions of its principles as other sciences." And at present I see it emphasized that education is an applied science, in the sense that it is formed by the application of other sciences; thus implying that it has no germinant idea of its own.

Certainly, education avails itself of all the other sciences, as these do of it; but the science of education goes forth in its own right and organizes all the sciences from its own creative center. It has its own single, central principle, which orders all the details of the complex process into a unified and harmonious whole; and this principle is self-activity. The science of education must show how the whole process is implied in this principle, while the art of education is but the application of the principle thus implied. Since the ultimate principle of any science is the ultimate principle of every other, education is not distinguished by its ultimate principle from other sciences, but only in the application of it. Since this principle is a universal one, its application yields a philosophy of education rather than a science. How it does this will best appear under the threefold aspect of the principle as it distinctly appears in the process of education.

1. This principle appears primarily as tension between the real and the ideal — the actual and the potential.

Since the universe is alive and not dead, moving and not fixed, this principle is universal. We live in a seeking, searching, surging world. There is constant striving for that which does not yet appear. Every object has a dual nature — something within it which tends to destroy its present form of existence and bring it near to the reality of the nature which constitutes it. Any thing imposes limitations upon itself which the thing will not rest under. The hills, rocked-ribbed and ancient as the sun, the planets, and the infinite hosts of heaven, are ever seeking new conditions thru the infinite of space and time.

In the organic world stress thru duality of nature is unmistakable. The plant or the animal is moved to self-realization by a resident force. In each case the object is in self-struggle. An organic thing is organic by virtue of the stress between its actual and its potential nature, by virtue of the relation between the real and the ideal which constitutes its nature. The ideal is ever striving for its freedom in the real — to become itself the real.

Man emerges out of the lower order of beings on becoming conscious of the duality of his nature; of the divergence between his real and his ideal self; between what he is and what he ought to be. He can lay hold upon his better self, and by conscious plan and purpose aid in his own

self-realization. He knows that what he is, in his present actualized self, is not what he really is by virtue of his manhood; and, feeling this discrepancy, he is consciously self-moved to realize his implicit manhood. Conscious self-activity is the ultimate retreat of self-consciousness; and from this single truth springs everything within the realm of human thought and action.

Herein is involved the whole of the religious life. Coming to consciousness of the better self is the second birth of the soul. Truly man must be born again, in order simply to be a man; and the whole of his life is but a succession of new births, in each of which man discerns deeper realities in his own soul. Herein man discovers God. "Religion is the life of God in the soul of man." In the conscious relation of the two selves lies the fact of sin and redemption. From this relation arises the possibility of man's going to heaven or hell. One not accustomed to think on this fact of self-consciousness will be surprised to find that all the doctrines of the Bible are explained by it; and, more, that it is the simple truth which has shaped the world's great religions. The Protestant Reformation was but a clearer recognition of the voice of the better self. This was the simple principle that dethroned kings and gave us democracy. To secure the rule of the better self is the desideratum of all governments. And so all moral duties are determined by the relation of the present, real self to the ideal self. Out of this come conscience, duty, responsibility, obligation, and the rest. Man's duty is simple; he ought to be what he is; that is, what he is by virtue of being a man. If he is really a devil, he can do no better than to play the game well.

In education this principle determines the end to be that of self-realization—the realization of the better self. Man is the product of his own educative process. Education cannot be ultimately tested in any form of external product; as, in what a man has or knows, but in what he is; thus making culture, in the true sense, the final aim. Nations have taken two views of the meaning of education; regarding it either as a means or as an end. The history of education can, therefore, be read only in terms of the relation under question.

Not only the aim but the method of education is thus determined. At every stroke of the teacher some present stress must be released, and some new ideal born; some new stress set up. The art of teaching consists at bottom in discerning the present stress of the life to be educated, and transforming it into a higher one. The whole question of interest lies here. A child is always interested, and interested in something worthy. The teacher is not so much to induce interest as to mediate it. To educate is to move the life onward and upward under the stress of ideals. The fundamental thought of method in education is this of the ideal passing into the real, that a new ideal may be revealed, which in turn becomes

real. The perfection of character sought in education is not an end to be attained, but an infinite progression by mediating ideals. Wherever teaching is found to be dead, it is because the teacher strives to induce action from without, instead of utilizing the self-activity of the pupil. Witness, for example, the dire distress of the teacher in striving to secure oral or written expression from the pupil when there is no inner motive to expression.

Thus "interest" expresses the tension between the real and the ideas in life; while that other great word "appreciation" expresses the passing of the ideal into the real, on the basis of its relation to the real. In the same way must be explained those other current terms of "correlation" and "concentration." Each subject of study is but a construction of the world under a given tension of life. Subjects have no external, fixed boundaries, thus becoming mutually exclusive. The failure to recognize this truth is a never-failing source of trouble, causing the teacher to resort to all sorts of schemes to correlate subjects and parts of subjects.

For instance, man considered in effort to realize himself thru his physical environment, in the form of the industrial world, forms geography; and, when more fully specialized, the sciences. The field is limited only by what is required to this end; there is no objective limit, and no matter reserved for the use of any other subject. History is formed by viewing man in effort to realize himself by means of his fellow-man thru institutions. For its purpose it may use all the material gone over by geography. Number arises from man's effort to adjust himself accurately and economically to some ideal end; and is thus a process of self-realization. Grammar, in treating the sentence, exhibits man in the explicit act of passing from his real to his ideal self, inasmuch as the subject of every sentence expresses man's real self, and the predicate his ideal; while the verb expresses the tension between the two. Literature has for its direct purpose the revelation of the ideal self in the real. Thus every subject is born of some phase of the life-tension; some outgoing effort to self-realization. It is just this living and determining factor that gives the clue to the teaching of every subject; so reveals its inner life and organization as to insure vital teaching as against mechanical teaching.

And when we pass to the school as the organized instrument of education, we discern the same germinant principle. All institutions are but projections of the ideal self in an objective form as a means to making the ideal real. Man, being conscious of himself, can be teacher to himself as pupil. The teacher-and-pupil relation is first a subjective one. The teacher is the pupil's own ideal adopted as a more efficient means of the pupil's development. From this center the whole question of school organization and management arises. There can be no successful school management without recognition of this fact.

2. In the process of education this principle of self-activity assumes a second form — tension between subject and object.

In the process of self-realization man does not simply hold his ideal in consciousness, but forgets himself in the objective world. The law of self-realization, as disclosed above, is by the law of self-sacrifice. Altruism is the method of egoism.

Everything lives in and thru another. Man intuitively feels that his life is found in the world about him; he is instinctively drawn to that world. This is explained by the fact that every self is the organic unity between this self and the other self. If at this moment one should say "I," and then read some poem not before read, the old *I* becomes a new one, which includes the poem. And thus with any other object of thought. The *I* is not the barren and abstract self, but always includes something other. What before appeared as tension between the real and the ideal now appears as tension between subject and object. The ideal which the mind seeks is the thought and spirit of the world which is objective to it. Subject and object implies a self-active principle which differentiates itself into the polarity of this and the other.

And here we have a new aspect of the germinant principle of education. All thought is to cancel the distinction between the subject — the real self, and the object — the ideal self; and the motive in the process is to break down the limitations which the object imposes on the subject. Subjects of study are so many enlargements of the self. These are taught that the pupil may have life, and that more abundantly. Knowledge is the means by which the finite self passes toward the infinite self. The pupil masters a subject, and may say, "I am that subject, and that, and that;" and if he could master all, he could exclaim with Jehovah, "I am."

Not only the motive, but the problem of method lies in the connection between subject and object. The mind and its object must be reduced to common terms. The objective process in things must be seen as the subjective process in thought. The percept, the concept, the judgment, and the syllogism are but processes of unity between the subject and the object; and no intelligent discussion of these can be made except by recognizing them as common processes of subject and object. If by reasoning, for instance, one forms a judgment, from the nature of an orange, that all oranges are yellow, it is because the oranges themselves form their yellow in the same way. The process of reducing a compound to a simple fraction is the process of the fraction itself. Thus the problem of method in teaching is the problem of reducing the learner and the object to be learned to a common process — to a unity of life.

3. But in the process of teaching this principle takes a third and final form, namely, tension between the universal and the individual, or between the creative energy and its object.

What the student is immediately striving for is the unity of the world of isolated objects. But he cannot establish this unity by directly relating them. Things are unified thru their common creative energy. Oak trees are not primarily united in space, but in an oak nature — energy — which produces them. The energy which produces one produces another, etc.; and in this creative act all are one. Events are unified in a common life below them, as implied in the word "event." Hence the unity sought is the unity of the object with its nature, or productive energy. In every act or thought one object is divided into its individual and its universal aspects. Thinking is relating; and the relation sought is always the two aspects of the object, as above indicated. This is the simple, but universal law of thought.

But note the real object of this vital process of thought. It was stated in discussing the tension between subject and object that the purpose of thought is to bring the thinker into unity with the object thought. This can be done only by the thinker discerning the creative energy of the object. On this ground only can they meet. On the plane of sense-perception there seems to be an impassible gulf between the thinker and the object. This separation grows less and less as the higher processes of thought are exercised. In fact, such processes are higher just because they bring the thinker to closer unity with the object thought. The thinker must find himself in the object, but this is just the self-active principle in the object. The thinker craves the reinforcement of the object's inner life, and is thus prompted to search out its genetic principle.

It thus appears that tension between an object and its creative energy is one with the tension between the real and ideal, described at the outset. Thus the circle is complete. The three tensions are but so many aspects of one life-movement. These three aspects of the principle of self-activity determine all phases and processes of school work — fix the aim, determine the methods, construct the course of study, and organize and manage the school. And, what is of the greatest significance, the following of this principle brings all school work into conscious and organic relation to every other educational force — the church, the state, etc. All move under the same principle to the same end — the full realization of all the beauty and worth implicit in human nature.

DISCUSSION

F. TREUDLEY, superintendent of schools, Youngstown, O. — During the most eloquent and delightful address of Mr. Tompkins concrete illustrations of the theme in hand were continually flashing before my mind.

I recall one evening, many years ago, when I had the pleasure of an invitation to a meeting of the Indianapolis Literary Society. The subject of discussion was Thoreau, and an able paper was presented by Professor Sewell, and remarks were made by Rev. Myron W. Reed. The point of this reference lies in the statement that from that evening my attitude toward nature and her beauties and glory was largely changed. I became interested in the naturalists.

From Thoreau my attention was extended to Burroughs, and old Gilbert White, of Selborne, McCook, Miller, Torrey, Jeffries, Abbott, Lubbock, etc., until nature took on a marvelous appearance. I cannot liken this influence better than by that parable of the woman who took and hid the leaven in the measure of meal until the whole was leavened. The philosophy of this illustration is clear.

I recall one beautiful day, which some of this audience will remember, when we were rapidly passing southward from St. Augustine to get our first taste of life below the frost line. The beautiful Indian river was lying upon our left, framed in a rich southern border, ducks rocking upon its surface, and herons standing like sentinels in its waters. A gentleman whom many of you know, of long service in the schools and possessed of that ripened wisdom which comes from many years of excellent living, crossed the aisle of the car and sat down by my side. Referring to a certain matter, he said in substance: "I was thinking of a remark made only last sabbath by my minister. He said, in illustration of the difference between God's actions and man's, that, if a man will cast a stone into the air, it reaches its limit of ascent, describes a curve, and with a heavy thud falls to earth. But God will take a bird, toss it from the bough, and off it flies in curves of beauty, alighting upon the bough again in perfect ease and grace. And all last week I was watching among the trees for these birds to see how beautifully they illustrated that thought." Continuing, he remarked: "Years ago, when I was a boy, a lecturer came into the village where I lived and used this illustration, over which I have often pondered: A father and his little son took a walk. Upon their return the mother asked the lad: 'Did you see anything, my son?' 'Yes, a man throwing away grain.' 'What did the father see?' asked the lecturer. 'He saw the sower going forth to sow. He saw the vast geologic processes whereby the earth was brought to the performance of its mission. He saw the field of golden grain and white-winged argosies bearing the harvest to nations beyond the seas.' 'Did you see anything else, my son?' 'Yes, I saw a man pounding stone.' 'But what did the father see?' 'He saw a sculptor carving out of marble the beautiful form he had constructed in imagination. And beyond this he saw the forms of the masters rising before him.' 'Did you hear anything, my son?' 'Yes, I heard the noise of a machine.' 'But what did the father hear?' 'He heard a message of death going out to a soul far away.'"

So do these influences in occult ways work upon us, to whom time and seasons and space seem no consideration.

This beautiful address, a veritable poem, illustrates the singular manner in which attention is held when we come to the consideration of lofty themes thru suitable avenues of approach. The real point of view is the poetical.

As for me, when I desire to find expression for my innermost thoughts and convictions, I resort to Holy Writ or to the poets. To the latter, for

> "I believed the poets.
> It is they which utter wisdom from the central deeps,
> And, listening to the inner flow of things,
> Speak to the age out of eternity."

And as the speaker was proceeding, the words came to me, borne out of the past by his eloquence:

> "More it is than ease,
> Palace and pomp, honours and luxuries,
> To have seen White Presences upon the hills,
> To have heard the voices of the Eternal Gods."

Mr. Tompkins referred to the tension which exists between the real and ideal, between the present and the future, between what is and what should be; and spoke of it as proceeding under conditions of "strain and stress."

Holy Writ thus speaks: "The whole creation groaneth." "Strain and stress" have, indeed, been placed as the prime condition under which we transcend present conditions of hardness and narrowness, and pass into conditions more favorable to life.

> "Only suffering draws the inner heart of song,
> And elicits the sweetest perfumes of the soul."

I am happy to be here; happy to have had the privilege to listen to remarks of so lofty and inspiring a nature; happy to feel that before even me may range such possibilities as have been suggested, all of them "implications" of this high doctrine of self-activity which has been preached, which implications, by the grace of God, shall become "applications," if not *here* fully, *there* in fullness.

PROFESSOR SAMUEL WEIR, New York University School of Pedagogy.—I fear lest the pleasure with which you have listened to this masterly discussion may have weakened your impression of its immense importance. I agree most heartily with the main proposition, that self-realization, in the highest sense, must be the aim of human striving and of education. It is probable, however, that few of you remembered the child while you were being carried so gently and pleasantly thru the air on the wings of light by the sweep of the Hegelian dialectic. The Stoics believed in submitting to the world-reason, and when fate overtook them they could still say: "Whatever befalls me is for thy good, O Universe!" One great teacher held the principle that whosoever sought to realize his life by himself, whosoever would save his life, should lose it. But whosoever should surrender his life under the law of universal love, with a profound faith in the ideal moral world-order, to him should come back all the riches and the power and the glory of that order to enlarge and enrich his own life. He should save his life.

We must not lose sight of the individual and of his realization in this universal outgoing. These higher ideals must become conscious in the child himself. He must come to feel by the gradual enlargement of his own ideals this significance of his life. It is not enough that the world-force must work out thru him. He must know something of his own working and of the higher meaning of his own life in relation to its moral self-realization.

One of the earliest Hebrew writers, in that sublime poem which has so often been misunderstood by the theologians, because they would not look upon it as a poem in which grand outlines of truth are given, had a knowledge of this higher meaning of the moral self. There was the herb bringing forth after its kind, there was life, there was intelligence; but higher than these was the knowledge of good and evil. It was this which brought man into relation with God. The discrepancy between the ideal and the real gave the sense of sin and the hope of realization. But this ideal had to become conscious in the individual. Not blind working, but conscious moral aspiration after the grand ideal, must come to light.

DR. JAMES W. BASHFORD, president of Ohio Wesleyan University.—I am profoundly impressed with Professor Tompkins' remarkable address. What higher compliment can I pay him as an educator and a thinker than to call him a younger brother of Dr. Harris? Summoned suddenly and unexpectedly to speak upon "The Principle of Self-Activity in Education," I can only reiterate and illustrate the thoughts which Professor Tompkins has already enunciated. The professor first dwelt upon the aspect of stress to which all young people are subjected by reason of the chasm between the real and the ideal in their thoughts and lives; he dwelt, secondly, upon the fact that the student never reaches a personal end by direct effort, and hence he presented to us the aspect of altruism in education. In the third place he dwelt upon the tendency to unity in all thinking.

The aspect of stress, due to the attempt of the individual to realize his ideal, furnishes the key to all biography and all history. The struggle begins below man in the vegetable and animal kingdom. Darwin has summed up the life of the globe in the phrase, "the survival of the fittest." This phrase is only another expression of the endless struggle of plants, and animals, and men to realize themselves. The plants crowd each other for soil and sunshine; each fish eats his smaller brother, and in turn is eaten by a larger; and man, the highest animal of all, sustains his life and can sustain it only by the death of those beneath him. Were not our ears so dull, our morning walk would be disturbed by the cries of crushed insects, and our noonday meal by the groans of the animals which are dying in order that we may live. The struggle extends beyond the animal life. Business is based upon the principle of competition. Your success in winning the position which you now hold meant the disappointment of some brother-teacher. In the political world one party's triumph is another's overthrow. In national life, like islands on a sea of time, one empire rises as another sinks. Is it marvelous, therefore, that when we enter upon the higher life of the mind and soul in children, we find the stress and storm of conflict? Each appetite clamors for indulgence, often to the detriment of others. The lower self, guided by a worldly ambition, is sometimes an open rebellion against the higher self. Surely you will not be speaking parables to children when you interpret their conflicts to them and show them that the only path to permanent peace is in the enthronement of conscience.

But if the first aspect of the principle of self-activity finds abundant illustration, the second fundamental fact, namely, that man never secures his end by directly seeking it, finds equal proof. While the fact of struggle is fundamental in vegetable life, it is not the deepest law of plants and trees. The fundamental law of the vegetable kingdom, that upon which the very existence of each species depends, is enunciated in the divine command found in Genesis, that each plant produce seeds and fruit after its kind. The plant does not bear seeds and fruit for its own sake, but for the perpetuation of its own species and for the nourishment of animals. Down in the vegetable kingdom, therefore, we find the first indication of altruism in the universe.

As we pass to the animal kingdom, the law of sacrifice for the sake of others becomes more marked. Many wild animals, indeed, destroy men or other animals without the slightest apparent compunction. But these same animals bring forth young with pain; and, so far from destroying the offspring which have caused them pain, they feed their young with care and defend them with their lives. Deeper, therefore, than the fact of selfishness in the animal kingdom is the law of motherhood — the law of sacrifice.

As we pass from animals to men, altruism becomes more imperious. We did not come into this world by a direct creative act and as isolated units. We are born into families; and the family is the divinely ordained organism by which the individual is instinctively called out of himself and made to live in his father and mother, in his brothers and sisters. Again, the child soon comes into contact with children from other homes, and its life is lived in connection with the larger life of the neighborhood. Again, beyond the neighborhood is the state or the nation, with its still broader altar of patriotism. Finally, beyond the nation stands the church, with its members living under different flags and speaking various tongues, but still calling each other brethren. So the family, society, the nation, and the church are divine organisms by which God calls the individual out of himself, and leads him to offer himself upon the constantly broadening altars of the family, society, the nation, and humanity. Do you see the profound significance of Dr. Tompkins' statement that no individual realizes his ideal by a direct process, that everything lives in and thru something else, that the one true method in education is altruism? The constitution of the universe debars the individual from reaching his goal by direct and selfish efforts. We live by death. We increase by being spent. Love is wisdom. The martyr is the philosopher. "Only," says Emerson, "as we forego all personal and temporal aids do we rise in the region of the universal and the eternal."

The third aspect of self-activity — the tendency of all thought toward unity — more readily interprets your own mental processes and is more profoundly suggestive than either of the preceding aspects. The principle that all thought tends to organize scattered facts is the key to all that is best in my own thinking. In the language of Coleridge, that truth finds me at greater depths of my being than either of the other principles. Arithmetic, grammar, history, chemistry become organic and vital to the student the moment his mind passes beyond the mere effort to memorize isolated facts and grasps the inner principle upon which all the separate facts depend. This fundamental act of reason by which the mind discovers the operation of cause and effect, and perceives the organic relation of apparently scattered phenomena, is the deepest process in education. Thru it the child emerges from the parrot stage and becomes a thinker. Perhaps I can illustrate the principle, and at the same time throw out a suggestion in response to the inquiry just made by one of the speakers as to what constitutes a person. We usually say that intellect, sensibility, and will are the three factors in personality. This analysis of personality is not quite complete. Evolution is probably truer than some of us dream, and these three roots of personality are found in the animals below us. Intelligence grows out of instinct; affection grows out of the sensibility which the mother animal manifests for her young; and will seems to be only the development of those incipient choices which birds make when they select their nesting places. Thus science indicates a unification of our philosophy of life, and an organic relation between the animal and human kingdoms. Again, these three elements of personality tend to run together, when studied closely. That which distinguishes human affection from the instinctive love of the mother animal for its young is the presence of reason and will in human love. That which distinguishes human volition from mere animal caprice is the presence of reason and affection in the act of will. That which distinguishes reason from the mechanical action of instinct is the presence of love and of will-power in our intellectual processes. Rosenkranz has laid strong emphasis upon the necessity of demanding that the child summon its will-power to its aid for the mastery of its mental tasks. Herbart, upon the other hand, has laid strong emphasis upon the necessity of the teacher attempting to awaken the interest of the child and to enlist its affections in its studies. Do you not see that both of these philosophers recognize that the intellect does not do its best work alone, that one recognizes that the will must be summoned, and the other that the interest must be awakened, in order to secure the most fruitful mental activity? Each philosopher is right in what he demands and wrong in what he ignores in education. Education can never secure the best intellectual results without enlisting the whole personality of the child. In a word, we teachers must carry this principle of unification beyond the abstract realm of thought into the practical realm of life.

Finally, Professor Edward Caird, in his *Philosophy of Religion*, furnishes striking confirmation of Professor Tompkins' remark that all thought moves back to the infinite unity and becomes religion. There has been an age-long dispute between the idealists and sensationalists as to the origin and certainty of our knowledge. The idealist holds that self-consciousness is the starting-point of knowledge, and that the one thing of which the mind has direct knowledge is itself. Upon the other hand, the sensationalist rests in a knowledge of mere external phenomena revealed to us thru the senses. Fortunately the tendency to unity of thought enlarges both of these partial theories of knowledge. How does a man become conscious of himself? Simply by distinguishing between himself and that which is not himself. As Hamilton profoundly remarked: "In the very act of self-consciousness the mind is forced to recognize something which is not itself." Thus the idealist is forced to recognize at least a not-self, which is as real as the self which alone he claims to know. Upon the other hand, underlying all activity of the senses is the mind's consciousness of its activity, its consciousness of itself. The sensationalist cannot analyze and vindicate the reality of knowledge coming thru the senses without

recognizing the self-activity of the mind. Thus this tendency toward a unity of knowledge of which Professor Tompkins spoke reconciles the two great schools of philosophy and furnishes us an ideal realism and a real idealism.

But the tendency to unity carries us a step farther. As Descartes recognized, the fundamental aim of philosophy is to discover an organic relation between mind and matter, to find the relation between self and the world. A wider view of consciousness leads to this broader unification of all knowledge. Just as thru my senses I become conscious of the external world, just as thru introspection I become conscious of myself, so thru conscience I become conscious of a Higher-than-self. The child no more stumbles at the knowledge of God than he stumbles at the knowledge of the external world. He is as clearly conscious of a power above self as he is conscious of himself. How else can we account for the imperative *ought* which reveals itself in every awakening personality? Along with the freedom of choice by which the schoolboy rises above the physical universe, by which he can elect his course contrary to the wishes of a billion fellow-men, by which he becomes a moral king and stands upon an equality with God — immediately the choice is once made by this moral king, there emerges in his consciousness the Greater-than-the-king, either approving or condemning the king's choice. In the presence of this mysterious One every human being rejoices when he has chosen aright. Before His presence every soul quails, when it has chosen evil. Now, the soul is not by nature humble. It does not quail before a mere abstraction. It does not dread a nonentity or fear a zero. Nor does the whole soul quail before one of its faculties. But this condemning and approving power is not simply one faculty of the human soul standing alongside of judgment and desire and taste. It commands desire. While it does not overawe, it condemns the will. What is this mysterious One whom all children recognize, and before whom we have all quailed? Is it not the presence of God in the soul of man? Is not Edward Caird right in saying that the human soul has three forms of consciousness — the consciousness of self, the consciousness of the world, and the consciousness of God? Thus we find self and the world standing together in organic relation thru their relation to God. Just as we found idealism and realism uniting in organic relation thru a true analysis of the consciousness, so we find self and the world coming into organic and vital relations with each other thru this final analysis of consciousness. The tendency to unity is the greatest force in education, because it is the deepest impulse of the reason; and this fundamental impulse of the soul carries the child back to God. Christianity is the final philosophy. "In Him all things consist."

DR. TOMPKINS.— I have no right to speak again, and do not desire to do so. I wish that the remarks of Drs. Weir and Bashford might be the closing benedictions to this session. What the teacher needs most of all is a full appreciation of the dignity and worth of man, as they have just been so eloquently presented. A clear conception of the aim and process of life is of vastly more significance to the teacher than all of our technical methods of instruction.

I fully agree with the gentlemen in regard to the points on which they differ from me. What they say is only an elaboration of what is implied in my general doctrine.

In reply to Professor Galbreath's question, as to why, since the principle is an old one, it had not been of more potency in the past, and what is in the way of its success in the future, I would say that there have always been men who would run after strange gods; and that in the educational world there were always men so desirous of attracting attention that they would promulgate new isms and cults as if they had discovered a new principle of education.

TO WHAT EXTENT SHOULD THE HIGH-SCHOOL PUPIL BE PERMITTED TO ELECT HIS WORK?

BY W. L. STEELE, SUPERINTENDENT OF SCHOOLS, GALESBURG, ILL.

In the summer of 1895 the course of study for the Galesburg High School was revised, and all the subjects in it were made elective. The facts and reasons leading to this action and the results following it form the outline of this paper.

The few graduating from the high school, compared with the many entering it, has long been the subject of comment by the members of the board of education. Different theories were advanced to account for this fact, some of which were, that the pupils enter the high school too young, too immature; that the work in the grades is not thoroly done; that pupils pass into the school without having learned how to study; that the transition from the grammar school to the high school is too abrupt; that many lack the taste, the ambition, and the capacity for such work. An irreverent member suggested, however, that the fault might be in the high school — not in the pupils. These comments and discussions resulted finally in an investigation.

The records of the classes graduating for the five preceding years were carefully examined. They showed that the average number entering the school annually was eighty, and the average number completing the course at the end of three years was thirty-six — an average loss of forty-four pupils out of eighty, or 55 per cent. A closer examination revealed the fact that thirty-two of these forty-four pupils dropped out during the first year; that is, 73 per cent. of the loss during the entire course occurred in the first year. Thus, the cause of so many pupils leaving the high school was seen to be in the first year, and the cause was found to be the failure of the pupils to do the work in one or more branches required to complete the course. These branches were Latin and algebra, about twenty failing in one or both subjects each year. To put it plainly, we had practically been refusing to teach to 25 per cent., or one child out of every four, any science, literature, history, or commercial studies, because the required percentage in Latin or algebra had not been attained.

Is not this true of all high schools, and why is it so? Is the fault with the pupils or with the schools? There is no question, in my mind, that in many cases the fault is with the pupils, for the reasons already given: immaturity, want of preparation, lack of ambition and capacity, and the great gulf between the grades and the high school.

Most high schools now provide a course, more or less honorable, without Latin, but I have yet to find one in which algebra is not required. Is

the human mind so constituted that it cannot be developed in any direction, beyond the most rudimentary stages, without the aid of algebra? Or is it a survival of our reverence for arithmetic in the grades, for which we have haunted the child's mind the first eight years of his school life?

In making a course of study, why not be governed by what we know to be true in life, namely, that an education is not such a little thing as the learning of certain facts about any particular subject or subjects, but consists rather in awakening and stimulating the mind to activity along some line of thought? Why not treat the children of the public as we do our own? If one of you had a child who was deficient in mathematics or languages, or, more mildly and perhaps more truthfully, was perfectly indifferent to them, what would you do? You certainly would not keep him at these subjects till he became completely discouraged and disgusted with all study; you would not lock the door to that part of your library which contains the volumes of literature, history, and science, saying to him: "You must not think of trying to become acquainted with any of these until you have first solved the problems in an academic algebra as far as logarithms." If you were set upon having your daughter become a musician, and it turned out that she could not learn music, or, what is equivalent, she would not try, would you not attempt to give her any accomplishment? The reverse of this, you know, would be true. You would, on this account, put forth all the more effort to arouse her interest in other directions. Why not, then, treat my child, whom I send to you for training, in the same manner? The school should aim to recognize diversity of talents, tastes, and dispositions — and respect them — the same as does the home.

To this end the board made the entire high-school course elective. It considered that the twenty who annually dropped out of the beginning class, for lack of interest or lack of ability to do the work prescribed, ought to receive as much aid as the public school could possibly give, and were certainly in greater need of it than the sixty who were able to do the particular work given, and remained.

I will admit that this is all nonsense, if the only object of the high school be to prepare its pupils for college, or to make of the more gifted an educated aristocracy. At a recent meeting of the Schoolmasters' Club of New England the mayor of Boston gained the distinction of being the first to advocate publicly such a high school. To be just to him, one must admit that the burden of his speech, as reported, was not opposition to the high school so much as dissatisfaction with the kind of work it is attempting to do with what he was pleased to call "the unfitted half." It was a call to schoolmen to be sensible in their dealings with children, rather than an attack on our sacred institution. However, if the main object of the high school be to raise the masses to a high plane of living and usefulness, if it be to help the dull and the slow as well as the bright

and active — the distinctive characteristic of our institutions, and the glory of our civilization — then the plan of elective studies is just and wise.

We arranged our work in three courses: (1) *the scientific*, with algebra and geometry, but no foreign languages, designed for those who do not intend to enter higher institutions of learning, yet who want a broader education than the grades give; (2) *the Latin*, intended for those who wish to prepare for college; (3) *the commercial*, designed for those who wish to prepare themselves especially for commercial life. This arrangement, however, is simply suggestive to the pupil. He is at liberty at any time, with the consent of his parents, to make a different selection, provided the subjects are being taught. To each subject is given a certain number of credits, the unit being one month of twenty recitations. For example, algebra, which extends thru nine months, is given nine credits. When any subject is not completed, no credits are given for it. When the pupil gets one hundred credits, which means one hundred months of successful work, he is given a diploma, in which is written the entire list of subjects completed and the value of each — making not only an intelligible diploma, but an honest one.

As was said at the beginning of this paper, the Galesburg High School has been conducted on the elective plan exclusively since September, 1895, the first class graduating last June. We have had time enough to experience the terrible results that some assured us would certainly follow if pupils were allowed to pass thru school studying only those subjects they might see fit to select. It was claimed that the subjects required for college entrance, that give mental fiber, would be passed by and the so-called easier ones substituted in their places; that their education would resemble a crazy quilt; that, in short, it would be a mere farce.

The elective course, perhaps, makes this possible. It is certainly possible to go thru the classical course of any college and come out with such an education. But it is a mistake to assume that boys and girls in their teens, when properly managed, will make such a choice. The healthy and ambitious boy is no more seeking an easy job than the successful or ambitious man. This is even more true of his sister. The teacher who thinks the child is a shirk, that he does only what he is compelled to do, has, to put it mildly, missed his calling. Some imagine that their success in life is due to the fact that they had a hard time when young and were driven to do their work. If this be true, why do not all the poor and oppressed rise to success? Their lot is certainly hard enough and the outside pressure sufficiently great. The mistake of such people and such teachers is in locating the power that compels to continuous and heroic effort as coming from without, whereas it comes from within the child. It is an *impelling*, not a *compelling*, force that develops the child. It is the work that he does because he desires to do it, not what he does because he must do it, that contributes most to his growth. When once this impelling

power, this consuming desire, is created within the pupil, compared to which all else is insignificant, the problem of his education is virtually solved. Anything short of this is not worthy to be called teaching. An elective course of study in the hands of a true teacher produces this result to a remarkable degree.

Some went so far as to say that it was absolutely silly to think of allowing boys and girls of high-school age to choose what studies they would pursue, for they have neither the knowledge nor the maturity of judgment to decide such questions. This is perhaps true, but who has? I know from experience that my own judgment in such cases is not very reliable. I may understand the educational value of the subjects, but I don't always know the boys and girls.

The way we had been doing in this matter, previous to the adoption of the elective system, was to ask the pupils, when they presented themselves for admission to the high school: "Which course do you wish to take, the Latin or the scientific?" They indicated their preference, and were assigned accordingly. Thus, it is seen, we had been asking these immature boys and girls, unconscious of their mental ability or bent of mind, and ignorant of the choice they were to make, to decide at once what subjects they would choose for the next three years. Incapable of choosing for one term, we demanded of them a decision for three years. Then, at the close of the fall term, when ten or fifteen pupils realized that it was impossible for them to carry their work in algebra or Latin, and their teachers were perfectly aware of the fact, we left them in the class to drag along as drones, belaboring them daily for their dullness and stupidity, till one by one they dropped out of the class and the school, to begin life with a broken spirit. Now, under the elective system, they are encouraged to choose another subject, which they ofttimes master, and, gaining confidence in themselves, complete a course with credit. Need I ask which is the better way?

The elective system thus permits the work to be adjusted to the pupil as he develops, as his capacity is manifested, and his type of mind is revealed — two things which the high school certainly does for every pupil. School boards, as well as parents, that ignore either of these, the capacity and type of mind, in the education of children, find their efforts and good intentions often failures rather than blessings.

This freedom of choice does not intoxicate the pupils nor cause them to follow every freak of their fancy, but it sobers them rather, sets them to thinking, and results in bringing them to their parents and teachers for advice. We have found this to be almost universally true. This has a most marked effect upon the teachers. When you are once admitted into the confidence of a child, he is never again the same person to you, and you are ever after a different one to him. It makes a great difference with the teacher whether he is required merely to record his opinion of a pupil's

knowledge of the subject, or is expected to be called upon by that pupil for advice about pursuing the subject farther or taking some other in its place. The one makes the teacher cold and indifferent, the other sympathetic and kind.

Since the elective system has been adopted, a great change has come over the relation between the high-school and the eighth-grade teachers. Each has actually grown interested in what the other is trying to do, visiting one another at work. In May the high school sends to each eighth-grade pupil an invitation for himself and parents to attend a reception given on an afternoon. The pupils of the high school give a short program, and the principal explains as far as possible, the nature of the first year's work, giving to each pupil at the close a card on which the subjects are printed. Forty-five out of fifty of the eighth-grade pupils attend these receptions, and in most instances are attended by one or both of their parents. The eighth-grade teachers are consulted by great numbers of these pupils and parents, and the high-school principal gives days of his time for such consultation. The tendency is to bring about the same conditions in the school that ought to exist in the home, where the children strive, not only to do their work well, but to do a little more work than is expected.

That freedom of choice does not cause pupils to slight what are called the disciplinary studies, but stimulates them rather to greater activity, leading them to do even more than is required, can be proved only by experience, and I here submit the record of our experience.

For four years previous to the change the average number entering the Latin, college, or orthodox course was seventy-six. During the four years of the present plan the average number choosing the same course has been ninety-eight, or, in other words, the number taking Latin and algebra for four consecutive years under the elective system is 27 per cent. more than for the same number of years under the former plan, showing conclusively that the elective system does not jeopardize the cause of so-called higher education. Of the ninety-four who graduated last June more than one-half had credits in excess of the number required — some as many as fifteen or twenty more than the necessary one hundred credits — proving that the tendency is to do more work than is required for graduation.

The principal reason, however, for permitting pupils to elect their studies in the high school is that it greatly extends the blessings of education. It reaches a large class of children who would otherwise never think of entering the high school, and, by broadening their horizon with a knowledge of history, literature, science, commercial branches, and manual training, greatly adds to their personal happiness and general usefulness as members of society.

Under the elective system the Galesburg High School has grown from

234 to 518 pupils, an increase of 121 per cent. During this time the grades from which the high school is fed have increased only 9 per cent. How can the other 112 per cent. of growth be accounted for? It must be on some other ground than increase of population. When it is found that the number of pupils now in the high school who are pursuing other than strictly the Latin and scientific courses is 56.7 per cent. of the entire school, is it not fair to infer that they are there because of the provision that allows them to take these studies?

In conclusion, it has been shown, from theory and experience, that the purely elective system in the high school gives all the people the kind of an education they desire for their children, which we regard for ourselves as our most sacred right; that it increases, rather than lessens, the number that prepare for college; that the pupils do more work than is ordinarily done under the non-elective system; and, best of all, that it brings the spirit of the home into the school.

What our high schools need most today is heart in their organization and in their teachers—not cold laws and bare facts.

THE SCHOOL DIRECTOR AS A FACTOR IN EDUCATION

BY SAMUEL HAMILTON, SUPERINTENDENT OF SCHOOLS, ALLEGHENY CO., BRADDOCK, PA.

Education has a business side. Viewed from that standpoint it is a kind of joint partnership, in which there are three partners—the teacher, the parent, and the director. Each contributes something to its success and participates to some extent in the profits. Each has rights which should be respected and duties which should be performed. And the greatest return in profits comes from this business when each knows his rights and will insist upon them, and at the same time is willing to perform his duties. Then each aids all in the participation of rights, and all aid each in the performance of duties.

To the teacher is intrusted the actual work of instruction. To perform his duties aright "he should be an active, aggressive, intelligent compound of love, zeal, wisdom, virtue, and justice. To him virtue is its own reward, and he receives little of any other kind on this side of the Eternal City."

The parent supplies the running expenses of the business and the capital stock which is invested. This investment, for a period of eight or nine years, is his child, the most precious asset in all the world to him. And its value as a living, working entity, in the wisdom and wealth of the world, will depend to a very large extent upon the education which it

receives during this period. From this investment the parent has a right to expect large dividends in intelligence, virtue, wisdom, and culture; in sterling character, right habits, correct morals, pure patriotism, and noble manhood and true womanhood.

FUNCTIONS OF THE DIRECTOR

The director is the business manager of this partnership. In him is vested the power to do anything and everything necessary to the operation of the school as a business institution. His duties are both local and legal; he represents the people, he also represents the state. The state supports a school system in order that it may have a wise, virtuous, intelligent, patriotic citizenship. To this end it establishes the school and vests in the director its complete legal and business management.

But the director is more than the business factor in the school problem. As the official manager of the system, he practically controls its professional progress. With his hand on the financial lever he can aid or retard this progress at pleasure. His vote will enrich and expand, or impoverish and contract, the curriculum. It means to his school a living, active, intelligent, professional teacher, or a lifeless, indifferent, mechanical bungler. It means growth or decay, life or death, to the professional spirit of education. He can make of his community a valley of dry bones, or one teeming with spiritual and professional life. His influence is either positive and helpful, or negative and hurtful. He is thus clothed with the power to start, aid, encourage, and direct the professional side of education, or to discourage, retard, hinder, and stop it. He may be either a destructive force or a constructive cause, but not both.

RESPONSIBILITY AND POWER OF THE DIRECTOR

Accepted authority means assumed responsibility. To the director the measure of the former is surpassed only by the magnitude of the latter. This responsibility has a financial, a civic, and a moral aspect. The financial responsibility is recognized when we remember that the director disburses annually $185,000,000. The civic responsibility is greater even than the financial. The state, in a sense, is mercenary. To some extent its motives are egoistic, not altruistic. It supports schools to make citizens. From the civic standpoint education is simply the training which the state gives to those who are to be its citizens, in order that the intelligence, advancement, and civilization of one age may be retained and made the basis of still greater achievement. All civic progress depends upon the virtue and intelligence of the citizen; these depend upon the school, and the school depends upon the director. The moral responsibility is not less important than the civic. We are all consumers of the common stock of accumulated moral worth. He who contributes more than he consumes is a benefactor, while he who draws in excess of his contribution is a

beggar. Every child in every school will be either a beggar or a benefactor. His moral worth will depend upon his education, his education upon his school, and his school upon the director. Life is a warfare, every child a soldier. The battle is unto death. Shall the child be one of the victors or one of the vanquished? Shall he go forth morally and intellectually as a strong, sturdy, stalwart giant, or as an aimless, helpless, hopeless pigmy? The director who provides the school and selects the teacher, and thus in a large measure determines the extent and nature of the child's education, must answer this question.

This responsibility is recognized in two ways: first, by the oath which many states require the director to take; and, second, by the almost unlimited power conferred upon him by legal enactment. Relying upon the solemn obligation that he will faithfully and impartially perform his duties, the state proceeds to make him, not only the business manager, but the legal prosecutor, the judge and jury, of the school system. Clothed with all this authority to direct the institution which is to shape human destiny and to mold human lives, it is highly important that the director be a man keen and accurate in his observation of educational facts, sincere in his convictions, correct in his conclusions, wise in his enactments, right in his decisions, and just in the performance of his important and manifold duties. In our examination of the director as the business, and the indirect professional, manager of the school system, it may be well for us to attempt to analyze him more critically and discover his ideal qualifications.

IDEAL QUALIFICATIONS OF THE DIRECTOR

1. *He must have high ideals in education.* These ideals will hold up to his admiring vision the necessary characteristics of a good teacher, of a good school, and of good educational facilities. His ideal will not be realized. No ideal ever is. The mind may contemplate it as an ethereal vision — faultless, harmonious, symmetrical, and complete. But, while it may be thought out, it can never be wrought out. As a mental will-o'-the-wisp it ever flits above us, luring us onward, receding as we advance, ever escaping our grasp, and refusing to become an embodied reality. Visionary and ethereal as an ideal must be, it is nevertheless an essential requirement of a good school director. High ideals mean progression, low ideals retrogression. The former means vigorous effort, healthful growth, boundless achievements; the latter, feeble effort, stunted growth, arrested development, retrogression, decay, death.

2. The model director must have keen perceptive power with which to discover the defects in the schools, when comparing the actual with the ideal. The first step toward the ideal strength to which we would attain is a just appreciation of the weakness we possess. And the first step toward educational progress begins in the complete discovery of the slow

pace at which we are traveling. As a child can never be made to comprehend the knowledge possessed by the teacher until the teacher has first comprehended the child's ignorance, so the perfections of an ideal cannot be even approached until the imperfections in the real are first discovered. The director, therefore, must have keen perception if he would note the lack of harmony between the actual and the ideal.

3. The model director must have good judgment with which to select and inaugurate the necessary remedial agencies that will help him to realize his ideals. This is the day of fads. Small-tonnage educational theorists have gotten far out from the shore on the sea of pedagogy, and, having lost their compass, are guessing the way to the desired haven. Little progress will be made in realizing high educational ideals if the director adopts the plans of these dreamers, these visionary theorists and pedagogic fortune-tellers. Sailing, not drifting, should be the motto of the business manager of our school system. To do this he must equip his vessel with the best machinery, follow the truest charts, and have on board a most reliable pilot, in whose hands is a compass tried and true. This equipment is the result, not of haphazard guesswork, but of a wise choice deliberately made by good common sense and sound educational judgment.

4. The ideal school director must possess an intense personality. Such a man is greater than his environments. He is the creator, not the creature, of circumstances. His real power is not in his environment, but in himself, in his character, his individuality, his attainments, his spirit, his personality. The director must have educational wisdom manifested in his high ideals, his keen perception, and his good judgment. But he must have zeal and personality as well as wisdom. Wisdom strikes when the iron is hot, zeal builds the fire and heats it. Wisdom *seizes* the opportunity, zeal *makes* it. Wisdom *guides*, zeal *moves*. Wisdom *spreads* the sails, zeal *makes* them. The director must have both. He must either lead or be led by the educational sentiment of his community. And whether he is to be its master or its slave will depend very largely upon his zeal, his individuality, his personality.

All will agree that these qualifications are desirable, and in a measure essential. And all will admit — I presume with equal unanimity — that they are not possessed in the superlative degree by the average director. The question I wish to ask, not answer, is: Can we do anything to help the director to secure this necessary zeal and wisdom? Certainly the age demands a more careful study of this question, even if we are as yet unable to formulate a desirable answer to it. The study of the director as a factor in education has received but little attention, and nothing practically has been done to help him. Much has been done for the child and for the teacher. To aid them the history of education has been written, its philosophy discovered, its science explained, and the

method of instruction outlined. We have normal schools, technical schools, and institutes for teachers; but we have nothing for the director. The beneficent results which these schools seek to bring about are often rendered null and void, because directors are ignorant of, or not in sympathy with, the spirit of progress they suggest.

THE NECESSITY FOR BETTER-TRAINED DIRECTORS

If these qualifications are desirable, let us ask if there is any existing necessity for a better education of the school director along these lines. The average director is the synonym of educational indifference, and educational indifference is the child of educational ignorance. The director who possesses it has little interest in healthful progress. He has no educational ideals commensurate with the age, and worthy of attainment. He sees no defects and is able to suggest no remedies. His influence, therefore, is negative and hurtful, rather than positive and helpful. He is a retarder rather than a director, a hinderer rather than a helper. This is possible in our school system. The director as its business manager has unlimited power. In most states his word is law. As its financial manager he controls its progress. His vote means substantial financial aid for or against every improvement. The same law which makes it possible for him to help, aid, and direct makes it possible for him to retard, oppose, and hinder. His educational sin may be omission, commission, or both.

But is there any real necessity for an attempt to educate him? We answer, yes, and cite three of the many reasons that might be given for our answer:

1. An adequate supply of trained teachers has always been a perplexing question. It will always be such until we have an adequate supply of trained directors. The law of supply and demand is inexorable. The latter always regulates the former. As long as the indifferent director will hire indifferent teachers, we may expect indifferent results, and a large supply of untrained teachers. "We have scotched the snake, not killed it." Completely to remove the effect we must remove the cause. And the untrained director is certainly one of the causes of the untrained teacher.

2. The condition of the average school property is a monument to the indifference and carelessness of the director. Especially is this true in rural districts and small villages. The grounds are unfenced, and the vagrant cattle of the neighborhood hold camp-meetings on the school lot. The gate is a postless, palingless, hingeless, latchless fabrication of the imagination. In fact, there is nothing of the gate there except the place where it ought to be, and even that cannot be located without a surveyor. The doors of the outbuildings are hung without latch or hinge, as these are regarded as nonessential in outhouse architecture. For want of care

and disinfectants these buildings often degenerate into dismal, dirty, dingy, disagreeable, and disgraceful devil-devised dens, with sin-scratched walls and sin-suggesting sentiments. Their condition thus is repulsive to the refined tastes and pure moral tone of the child, and they become "seminaries of sin," whose vicious, venomous, voiceless, vice-producing virus is sufficient to annul the whole moral influence of the best of teachers. The well or spring was not cleaned prior to the opening of school, and is filled with decaying and death-dealing animal and vegetable matter. The pump is without a handle, spout, or stalk, and the supply of water is neither pure nor abundant. The door is without a knob, and the windows without glass, and the building during vacation was in all probability the gloomy abode of tramps and bats. There are no fastenings on the shutters, and their flappings in the wintry wind are like the spiritual rappings of some departed director who failed to do his duty while in flesh, and thus in aimless, endless restlessness returns as a warning to the living. The windows are without shades, and the blinding sun beats in upon the unprotected heads of the children, imparing the delicacy and the power of the eye for all time. The unpolished stove is covered with an incrustation of rust that has been accumulating since the days of Jackson. The door has but one whole hinge, and the crack in the bowl of the stove, from which exude deadly gases to stifle the children and retard their mental progress, is neither a thing of beauty nor utility. The school building has not been cleaned within the memory of man. The craze for cleaning schoolhouses once every twenty-five years, whether they need it or not, has not yet reached every school district in every state.

Barring hearsay evidence, many careless directors could scarcely prove that the schools are kept in actual operation, as they seldom drop in to see them. They abundantly and lavishly supply the schools with floors, ceilings, and walls; but the "extras" which beautify the room and charm the child, and cultivate within him a love for the beautiful in nature and art, are there only as mental concepts, not as material realities.

I have thus brought before you the worst conditions of the worst schools in the worst communities, that you might see in this unsightly aggregation the accumulated results of the director's indifference and carelessness, and the necessity of an attempt to train him. And while these conditions are not the rule in this country, some of them are found in some districts, a few of them in many districts, and many of them in a few districts.

3. There is a mass of library legislation in the country. In fact, in every state in the union save two the library law is a part of the school law. All this library legislation is based upon the principle that the free public library is and should be an essential part of the public-school system, and as such should be supported by public taxation. The public library is thus regarded as the complement of the public school. The

school trains the mind, the library enriches it. The one builds the mental structure, the other furnishes it. The one sharpens the mental appetite, the other gratifies it. It is now more than forty years since these relations of the library to the school were first pointed out. Yet the school director, as the business manager of our school system, has scarcely considered the subject, and in most communities nothing practically has been accomplished. In the name of justice, must our children, the priceless treasures of home and the dearest hope of the nation, be robbed of their birthright for forty years more because of the indifference of the school director? We spend large sums in making it possible for the children to learn to read, but thru the indifference of the director we have done almost nothing in making it possible for them to read to learn. Learning to read comes first, reading to learn naturally follows. Without the latter the former is unnecessary.

THE METHODS OF TRAINING DIRECTORS

Assuming that there is a necessity for better-trained school directors, the question naturally arises: Is it possible to train them, and how may it be accomplished? The time has come for raising this query for thought and discussion, even tho we may not be able to answer it satisfactorily. For thought and discussion must precede the practical solution of every educational question.

If the director is ever to be reached and helped to a higher and truer appreciation of his importance as a factor in education, it is evident that it will not be by sending him to school. It must be done for him largely in his home; and the press, the platform, and the book must be the means by which it is accomplished. This is a difficult problem. But its difficulty is the state's opportunity. What, then, is the opportunity of the state?

1. It could furnish him gratuitously with a paper, edited expressly for him by its brightest and brainiest educational writers.

2. The state could prepare and furnish to the director a set of directors' reference-books, covering every phase of his work, to be turned over by him to his successor in office. We have books for lawyers, books for doctors, and books for teachers — why not have books for directors? Every profession and every vocation has its library — why not have a small library of a dozen books for the director?

3. The organization of directors by counties and then by states will aid greatly in an effort to train school directors. In this way much has already been done in some states. The Department of Administration of the National Educational Association will in due time give recognition to the director as a factor in education, and at the same time focus the study of educators on the school problem from his standpoint. Formation must precede reformation, and evolution revolution. This work must proceed

from within. The director must be put to studying himself and his duties, ere the dormant seeds of truth will spring up into vigorous growth. Organization, agitation, and investigation will help, but the main work must be accomplished thru the agency of books and papers.

4. The institute or educational meeting should do more for the director than it has yet accomplished. His presence should be required, even at public expense, at every such meeting, and the program should provide for the discussion of such subjects as would be of interest and profit to him.

The reading of a few books may not accomplish the desired end at once, but it will help. Two books carefully read by a poor Danish boy, whose only heritage was the poverty of his shiftless parents, made Hans Christian Andersen a great literary character, and gave to the world one of its brightest stars. The reading of a single book resulted in the establishment of the society of Jesuits, and called into existence a system of education which in a few short years controlled the schools of Italy, France, Spain, and Austria, and for more than a century was the dominating intellectual power of the world.

Books and papers may not do all that is desired, but they will do something. This is an age of organized movements to train the masses by courses of reading. The Chautauqua movement, the various reading circles, the scientific clubs, the women's clubs, and the correspondence schools are not visionary schemes. They are successful institutions, accomplishing much in their lines. The Cosmopolitan University enrolled twenty thousand students the first year. Why not organize such a movement for the school director?

A systematic effort to train directors will cost something. So does the effort to train the children. There is something more absurd than the blind leading the blind. It is the blind trying to lead those who see. We pay annually $185,000,000 to educate the children. Would it not be good business, common sense, and economy to spend a small part of it in an effort to train those who are to disburse the balance?

But is the state justified in training the director at public expense? It is its duty to maintain at public expense a complete school system. The director is a necessary and an important factor in it. He is an essential part of it. And is not the duty of the state to the part, part of its duty to the whole? The director holds the balance of power in the school system. He regulates and controls its progress. He is expected to perform an important gratuitous service to the state, and should not the state in return perform this important gratuitous service to him? Without the latter we may scarcely expect the former. The director has not spent and will not spend his money to help the state. Will the state be without that help, or spend the money that will aid in securing it?

The director is the absolute monarch of the school system. As its

business manager his authority is unlimited. And as the financial control regulates the professional spirit, this authority means progress or retrogression, growth or decay, life or death to the school. If this authority is to mean life, growth, progress, certain qualifications are necessary in him who exercises it. It is certainly desirable that he possess these qualifications. Is it expedient that we attempt to develop them in the director by systematic training? If we try, shall we succeed, and what shall be the nature of the effort? We have asked these questions, but not answered them.

Some may attribute these questions to the speculations of an idle dreamer or a visionary theorist, and toss them over into the great pedagogical museum of fads, fossils, and freaks, fit only to augment the hodgepodge of impossible, improbable, and impractical educational suggestions. It is futile to remind such objectors that Lovejoy, Garrison, Whittier, and Wendell Phillips were once regarded as idle dreamers; that some of the professors in the universities of Europe were the last among the people to accept the discoveries of Newton; that Galileo had to deny the truth of his discoveries upon his knees; and that a learned engineer proved beyond a doubt that no steam-vessel could ever cross the Atlantic, because it could not carry coal sufficient to propel it more than one-third of the distance. The proposition to train directors may now be impossible and impractical, just as it was once impossible to look thru the human hand. But we should remember that the impossible has time limitations, and human progress consists, to a large extent, in making the impossible possible.

REPORTS OF COMMITTEES

REPORT OF COMMITTEE ON UNIFORM FINANCIAL REPORTS

To the Department of Superintendence, National Educational Association:

Your committee, appointed at the Chattanooga meeting of this body to report upon some uniform style of financial school report for the use of cities or school districts, and also upon some form suitable for the use of state school systems, begs leave to report as follows:

The committee has not found it practicable to have a meeting of its members before coming to Columbus. Discussion of the matters committed to it has been carried on by correspondence, both between members of the committee and with others.

The printing of this report, so that it might be in the hands of the members of the department at this meeting, was authorized at the time

this committee was appointed, but, in view of the fact that the members have not been able to meet for final discussion of the matters intrusted to them until the assembling of the department in Columbus, it seemed best to have printed only the proposed form.

It is not probable that any form for financial school report could be presented which would be entirely satisfactory to everyone. Your committee is of the opinion, however, that most persons would agree on nearly all important items, and that an agreement should be made thruout, even tho, to some, the classification of a few minor items seem arbitrary or incorrect.

While local conditions enter into necessities for expense in any public-school system, yet one of the most useful means of estimating proper expenditures, and the necessity for particular expenditures, should be afforded by a study of the financial school reports of other, similar cities or districts. As these reports are at present made, they are of little use in this respect. Items given in one report are omitted from another. Items of income or outgo are differently grouped in different reports, and the statement is made in such a way that it is impossible to separate the items for the purpose of reclassification. In getting the cost of education per child, different items are put into the total cost of education, which forms the dividend, while sometimes the divisor is the number enrolled, sometimes the average number in daily membership, sometimes the average number in daily attendance.

One of the chief studies of a wise administrator of schools is to make the cost of education per child as low as consistent with the best service. Attention to this and to a comparative study of reports for a period of years, now that most of our school systems have become established on a somewhat similar plan, should give an idea of the average or normal cost of education per child. Having this, the manager of schools may know how expense in his system differs from this normal standard, and, if not normal, why it is above or below. This knowledge cannot be arrived at, however, until the same items are included when computing cost of education and the same divisor is used in obtaining the average. By careful comparative study, railroad men know the average cost of hauling freight per ton per mile, and the cost per mile of transporting a passenger. Those administering schools should be as well informed upon the cost of education.

The two things which one studying a report of school finances most desires to know are, first, the rate of direct local taxation for schools borne by the community reporting, and, second, the average cost per child per year for the usual educational expenses. There are many items which, when given, are explanatory of these two, and serve to correct the inferences which might be drawn from a bald statement of them. There are also many items, not directly related, which aid in giving a correct

estimate of the conditions surrounding the school organization reporting.

In arranging the proposed form an attempt has been made to group items so that the two prime facts which such a report may show may be easily determined; and to give, in addition, information of interest and use in such comparative study of income, outgo, and conditions as those charged with the management of school systems find it profitable to make.

The heading of the blank form was, at the suggestion of members of the committee, made to cover cities, school districts, or school corporations. In some cases the city and the school district have the same boundaries; in other cases the school district covers territory not included within the limits of the city; in some cases the title varies, and the school district is called a school corporation. The proposed heading will permit the form to be used, not only for cities, but for any school district, or for any form of organization the purpose of which is to carry on public schools.

Taking up the items of the form, Nos. 1, 2, and 3 serve to show the rate of local school tax, and to determine how this rate in one system of schools compares with that in another. The proportion of the true value at which property is assessed for purposes of taxation varies so in different states and different cities that all of these items are necessary that a comparison may be made. A tax of seven mills on the dollar, where property is, as in some cases, valued for taxation at only one-tenth of its actual value, is really much lower than a tax of four mills in a city where property is valued for taxation at two-fifths its actual value. The tax of seven mills on the one-tenth valuation might be increased on the same valuation to a tax of sixteen mills before it would be as great in reality as the four-mill tax on the two-fifths valuation. A tax of six mills on the dollar where property is assessed at one-fourth its actual value is in reality only one-half as great as a tax of three mills where property is assessed, as in Massachusetts and in some other states, at its full actual value. With the figures given in Nos. 1, 2, and 3, valuation and tax rate may be reduced to a common basis, and fairly compared.

Under the head of receipts, the ordinary and extraordinary sources of income are separated. The ordinary sources, items 4, 5, 6, 7, and 8, serve to explain each other, and also to explain No. 3. In some states little or nothing is received from state distribution or funds; on the other hand, in at least one commonwealth, this state school fund is so generously endowed that, with prudent care, it should, in the future, carry a large part of the expense for public education. Where this source of income is large, the necessity for local taxation is correspondingly reduced. In cases where the county figures to a considerable extent as the unit of taxation the necessity for tax in the local school district is likewise lessened. In many cases the amount received into the school fund from fines,

licenses, and penalties is considerable. On the other hand, this source of revenue is sometimes large, in some cases even providing the greater part of the funds needed for the maintenance of the schools. Where such a condition as this exists, the necessity for taxation, of whatever sort, is materially reduced. Cities or districts sometimes have unusual or temporary sources of income — gifts or bequests, interest on permanently invested funds, tuition of non-resident pupils, etc. These items, indicated in No. 8, serve to put all the facts before the reader of the report.

Receipts from money borrowed and from the sale of bonds are not natural or regular sources of income. The receipts from sales of bonds are generally to be applied to some particular purpose, usually the purchase of sites and the erection of buildings. Income from loans is a temporary makeshift. Nevertheless, these two items must be reported to give a correct understanding of the situation.

Expenditures seem to fall into three classes: the usual current expenditures necessary for the maintenance of the schools; expenditures for sites, buildings, permanent improvements, and equipment; other expenditures which, for various reasons, are not put in either of the two preceding classes.

For the purpose of this report the first of these classes is by far the most important, for it would probably be conceded that from this item of current expenses should be determined the cost of education per child, the most important item to be shown. Most of the difficulties in preparing such a form as is here proposed are met in the attempt to agree upon the items which should be included and those which should be excluded from item 13. Item 12 is simple, including only expense for regular and special teachers, and for those engaged in supervising or directing the work of instruction. An agreement is easily reached upon most of the elements making up the total in No. 13. Here, without doubt, belong all expenditures for salaries of executive officers of the board; salaries of janitors; fuel; light; water, where this is purchased; material and labor for ordinary repairs to buildings and premises; the care of grounds; text-books, where these are owned by the school board; school stationery; school supplies, both those for janitors and those used in the work of instruction; cartage and freight; advertising; election expenses; school census; legal expenses; postage; telegraph and telephones; etc. Your committee would also include sums paid for rooms or ground rented for the use of the schools. It may seem inconsistent to include rent here, while excluding interest paid, and interest estimated on value of buildings and grounds used for school purposes. Rent, however, is seldom a large item, and it seems best to class it as current expense.

Actual usage as to items included in "cost of education" varies widely in different cities. Perhaps in one case only part of what is included in No. 12, simply the expense for teachers, is included. In another city

the cost of instruction and supervision, all of No. 12, is included, and this is reported as "cost of education." Sometimes to these items is added cost of janitors, fuel, and school supplies, while all other items are omitted.

It has been urged that to the items grouped under No. 13 should be added the sums paid for interest, and also a sum for interest, estimated at the current rate, upon the value of all grounds and buildings owned by the school district and used for school purposes. The item of interest paid upon bonds or upon temporary loans has been arbitrarily excluded from No. 13. This has been done because interest is not directly an expense for educational ends; because in many cities no debt exists and no interest is paid. If the item is included, it will in some cities weigh unduly in the showing of the cost per child. Whether school buildings and grounds shall be purchased by direct appropriations of funds from the school treasury, or by funds derived from the sale of bonds, is a matter regulated by each community for itself, under state laws, and one plan or the other is followed, as the particular community considers advantageous. The matter is largely out of the management or control of those directly charged with administering the schools. Your committee has, therefore, recommended this exclusion.

The question might be raised as to including in No. 13 the interest upon estimated value of buildings and sites and permanent equipment. While it is true that the community is permanently deprived of the use for other purposes of the sums invested, its inclusion would be a wide departure from any prevailing usage. Estimates of the value upon which interest should be computed would vary largely, as one person after another, in different years, was called upon to make the estimate, and the item would become a variable factor, causing apparent cost of education to show strange increase or decrease. Your committee has, therefore, considered it wiser to exclude both interest paid and interest estimated from "cost of education."

Items 14 to 19, inclusive, show permanent investments in plant. The items are separated, because it is desirable to know amounts expended for each purpose. Some little perplexity may arise in classifying expenditures under Nos. 16 and 17. Probably window shades and poles, and carpets, should go under 16, while door mats should go with brooms under 13. The repairing or replacing of shades should probably go under 13 also. Maps, charts, globes, etc., with all original fitting up of laboratories and workrooms, as well as additions of permanent pieces of apparatus, belong under 17; while the repair of apparatus and the replacement of the daily consumption and small breakage of laboratory material and utensils should be counted under 13, as should rebinding and repairs of library and reference-books. Bookcases, etc., an improved heating plant, a new system of ventilation put into a building, fall naturally under 19.

Items 20, 21, and 22, not placed with either of the foregoing classes of expenditure, are desirable for information, and are therefore included.

Altho this form for report does not resemble a bookkeeper's balance sheet or exhibit, yet item 24 is desired as a matter of information, as is also item 27. Items 25 and 26 are necessary to give a correct understanding of the significance of item 24. Items 28 and 31 are also desired as items of information, important as giving a full knowledge of the situation which exists in the reporting district. Nos. 29 and 30 modify considerably the significance of 28.

Items 32, 33, and 34 give an opportunity to estimate the cost of ordinary schools, free from complications with the unusual schools indicated in these items. They also give information as to what extraordinary educational responsibilities are assumed by the community.

Item 35 is inserted simply as information often desired, but frequently omitted from school reports.

Item 36 sheds light on the item following, and both of them are things well to be known when considering items 38, 39, and 40. These facts are not all strictly related to finances, but help in a view of the whole situation. They should often be borne in mind as correctives when considering items 3 and 44.

Items 41, 42, and 43 bear the same relation to 40 that 32, 33, and 34 do to the sum of 12 and 13. They permit the cost of education for the common schools to be separated and computed apart from that of the schools for special classes or purposes indicated in 41, 42, and 43.

There will no doubt be criticism of the selection of No. 40 as the divisor in obtaining No. 44. Both No. 38 and No. 39 were considered.

No. 38 varies so in different cities in proportion to the school population, and the average number of days each pupil enrolled is in attendance during the year varies so, that this does not seem to provide a divisor that is in any degree stable or reliable. Neither does the enrollment, in any great degree, determine the number of teachers or the school accommodations necessary.

For many reasons No. 39 seems the most suitable divisor. If computed in a uniform manner, the figures showing number in average daily membership would most nearly show the requirements for schoolrooms, furniture, supplies, and teachers. But it is not true that these figures are obtained by the same processes, or based upon the same facts, in different school systems. Usage varies so in computing membership in different schools—pupils in some cases being counted as members of the schools, when in other cities the same state of facts would cause the child to be considered as no longer a member of the school—that fair comparison is apparently not practicable by the use of this divisor.

Your committee is of the opinion that a divisor as little subject to misunderstanding as possible, and one based upon facts which are obtained

in the same way everywhere, is of the first importance. The members believe this is provided by item 40, and we have, therefore, made that item the divisor to be used, in connection with items 12 and 13, to obtain what shall be known as the "cost of education."

Your committee further recommends that the accompanying form for reports of cities or school districts be used as a basis for uniform financial reports by state superintendents of public instruction.

Your committee finds it impracticable, without further time than has been at the disposal of its members, to present a suitable form for report showing the important facts as to finances of state schools and educational institutions other than public schools.

Respectfully submitted,

C. G. PEARSE,
W. W. STETSON,
JOHN R. KIRK,
C. A. BABCOCK,
C. M. JORDAN,
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D. M. GEETING,
Committee on Uniform Financial Reports.

PROPOSED FORM FOR

REPORT OF THE SCHOOL RECEIPTS AND EXPENDITURES OF THE CITY

(OR SCHOOL DISTRICT OR SCHOOL CORPORATION)

of_____for the year ending_____19__

1.	Estimated actual value of all property in the city (or school district or corporation).....		$.....
2.	Assessed valuation of all property in city (or school district or corporation)		.....
3.	Rate of school tax levied on each dollar of assessed valuation of city (or school district or corporation).....		.....
	RECEIPTS		
4.	Received from state apportionment or taxes.....	$.....	
5.	Received from county apportionment or taxes.....	.....	
6.	Received from city (or school district or corporation) taxes.....	.....	
7.	Received from fines, licenses, penalties, etc.....	.....	
8.	Received from all other sources except loans and bond sales. (Specify different sources).....$.....		
	.....		
	.....	... ...	.....

9. Received from loans
10. Received from bond sales
11. Total receipts, all sources

EXPENDITURES

12. Paid for salaries of teachers and supervisors
13. Paid for other current expenses, excluding interest:
    - Salaries of officers
    - Janitors
    - Fuel and lights
    - Text-books, including copy- and drawing-books
    - Stationery
    - Other supplies for schools
    - Ordinary repairs to buildings, etc
    - All other current expenses
14. Paid for sites
15. Paid for additions and new buildings
16. Paid for permanent furnishings and furniture
17. Paid for permanent equipment for manual training, science laboratories, etc.
18. Paid for reference- and library books
19. Paid for all other permanent improvements, such as grading, paving, etc. (Specify different expenditures)
20. Paid for interest
21. Paid on principal of loans
22. Paid on principal of bonded debt
23. Total paid out, all purposes
24. Cash on hand at beginning of year
25. Cash on hand at beginning of year in fund for sites and buildings. (Included in 24)
26. Cash on hand at beginning of year in sinking fund. (Included in 24)
27. Warrants outstanding, beginning of year
28. Cash on hand at end of year
29. Cash on hand at end of year in fund for sites and buildings. (Included in 28)
30. Cash on hand at end of year in sinking fund. (Included in 28)
31. Warrants outstanding at end of year
32. Paid current expenses, evening schools. (Included in 12 and 13)
33. Paid current expenses, teachers' training schools. (Included in 12 and 13)
34. Paid current expenses, schools for defectives or other special schools. (Included in 12 and 13. Specify different schools)
35. Bonded school debt of city (or school district or corporation) at end of year
36. Population of city (or school district or corporation)

37.	Persons of school age, ... to ..... years, inclusive, in city (or school district or corporation).....		.....
38.	Number pupils enrolled, all schools.....		.....
39.	Average number in daily membership, all schools.....		.....
40.	Average number in daily attendance, all schools.....		.....
41.	Average number in daily attendance, night schools. (Included in 40).....		.....
42.	Average number in daily attendance, teachers' training schools. (Included in 40).....		.....
43.	Average number in daily attendance, schools for defectives or other special schools. (Included in 40. Specify different schools).....	....	.....
44.	Annual cost of education per pupil. (Sum of Nos. 12 and 13 divided by No. 40).....		$ .. ....

REPORT OF THE COMMITTEE ON AMENDED SPELLING

To the Department of Superintendence, National Educational Association:

Your committee "appointed to consider the advisability of advocating additional changes looking toward the further and more rapid amendment and simplification of English orthography," presents the following report:

The orthography of the English language never has been, and, in the nature of things, never can be, constant or fixed. Only dead languages can present an unchangeable orthography. The form of words in Chaucer ("wel of English undefyled") is so different from that in use now as to render the reading of the *Canterbury Tales* without a glossary impossible. Spenser, Shakespeare, and Milton, each in turn, spells differently from his great predecessor, and it is therefore an unreasonable demand that the present orthography shall be retained for all time.

Since the spoken is the real language, changes in spelling, in order more perfectly to represent its words, can in no sense be regarded as marring it, or breaking the continuity of English speech or literature; and apprehensions on this score can be attributed only to lack of knowledge of the science of language, or to little acquaintance with the history of literature. Nor can the present spelling be justified on the ground of etymology, for it often sets at defiance all etymological rules and principles; moreover, it is not the office of spelling to teach etymology, nor can it do so: it can simply illustrate the etymology of the word to those already conversant with the history of the language.

The object of written or printed words being to represent the sounds of the language, and these varying from age to age, the symbols which represent them must be changed correspondingly, if the two are not to

be wholly divorced. Changes must consequently come at some time, and be advocated by somebody; and it would seem that upon this department, constituted as it is of persons whose profession it is to direct public education, and the object of which is the improvement of the work of the schools by the invention of better methods of teaching, the responsibility of taking the initiative in the advocacy of amended spelling devolves in an eminent degree. It would be difficult, indeed, to point to a greater waste of time and mental ability in the entire educational field than that which is caused thru the teaching of our utterly indefensible orthography. The general adoption and teaching of amended spelling, facilitating the learning to read and spell, would bring in its train a saving of time and mental powers which could be devoted to other branches, and this would mean an enrichment of the public-school course of instruction. It would also facilitate the acquisition of our language by people of other lands, and thus greatly aid our missionaries in their efforts to Christianize (as this generally means to Anglicize) the heathen by whom our English Bible must be studied, as well as all other persons desiring to learn our tongue, thus hastening the time when English shall be the universal medium of communication. A powerful incentive to this course presents itself to us at this time, when our government has practically assumed parental relations to large populations in the East and West Indies speaking in other tongues, whom it is our interest and our duty to win to the use of English as soon as possible. So also our relations with Spanish America, which practically means the entire continent south of the United States, have become, and should continue to become, more intimate, and hence present another strong argument urging us to render our medium of communication more easy of acquisition to these people.

Other nations have led the way — Germany by imperial edict; Italy, Spain, and Portugal gradually — in order to promote ease of utterance as well as acquisition; and in our country, in this nineteenth century, great progress has been made toward simplifying and amending our orthography, notably by lexicographers and writers on scientific subjects. Most important of all is the fact that the changes recommended by this department, and adopted by the National Educational Association at Washington in 1898, have been largely accepted.

Moreover, as we now find *odour* and *odor*, *sate* (preterit of "sit") and *sat*, why not also *are* and *ar*, *give* and *giv*, *possible* and *posibl*, etc.? Give freedom to use that which is preferred, and the right and common-sense will prevail, and amended spelling will soon be a fact. It should always be remembered that it is not necessary that all persons familiar with the present orthography should set about to learn the amended spellings; only teachers, authors, editors, proofreaders, and stenographers need do so.

As regards proofreaders, who would be especially inconvenienced and

would be *obliged* to learn the new spellings, it may be said that their labors would be on the decrease as fast as the new generation of spellers would become the authors, and writers, and contributors to the press. Our first aim must be to secure recognition for the amended forms in the dictionaries and schoolbooks, and then leave the work to free will and time.

Your committee heartily indorses the *ten rules* adopted and recommended by the American and the British Philological Associations, but for prudential reasons limits its recommendations at this time to those mentioned below, fearing that prejudice, lack of knowledge of the subject and of the reasons for the change, and a general innate resistance to change from long-established usage, aroused by such sweeping changes, would prevent the general adoption of amended spellings, and thus retard, rather than promote, the end in view. Your committee, therefore, presents only the following resolutions, with the request that action on them be deferred until the next regular meeting, one year hence:

Resolved, That in all the published proceedings of this department the recommendations of the American and the British Philological Associations be adopted at once, so far as said recommendations refer to the dropping of the final *e* in words in which it does not serve to lengthen the preceding vowel, but rather tends to mislead the learner — thus spell *hav*, *giv*, *ar*, *bad* (preterit of "bid"), *definit*, *derivativ*, *amiabl*, etc.; and to the substitution of *f* for *ph* and *gh* when these digraphs represent the sound of *f* — thus spell *geografy*, *fantasm*, and *enuf*, etc.; and to the dropping of *gh* in all words in which this digraph is silent — thus spell *thot*, *bou* (bough), *ni* (nigh), etc.

Resolved, That in all words in which the amended spelling recommended by said associations is in accordance with the etymology of the word, it be adopted in the published proceedings of this department; thus spell *coud*, *sovran*, *hole* (whole), *iland*, *gastly*, etc.

Resolved, That the publishers of dictionaries be requested to extend recognition to these changes by inserting these spellings with those now recognized in the body of all dictionaries published or revised hereafter, and that authors and publishers of schoolbooks be requested to use only the amended form of spelling in such publications after July 4, 1900; and that all literature intended for use and circulation in the East and West Indies, especially the schoolbooks to be used there, be published with the amended spellings recommended by the associations mentioned above.

Resolved, That a standing committee of five members of this department be appointed, whose duty it shall be to promote by every means in their power the amendment and simplification of English orthography, and to make a report to this department annually.

Respectfully submitted on behalf of the committee.

R. K. Buehrle.
Thomas M. Balliet.
C. C. Rounds.
E. O. Vaile.

SOME NEGLECTED FACTORS AND FORGOTTEN FACTS[1]

BY T. C. MENDENHALL, PRESIDENT OF WORCESTER POLYTECHNIC INSTITUTE, WORCESTER, MASS.

Nothing, during the last month or two, has been to me a more impenetrable mystery than my rather prompt and, I regret to say, practically irrevocable acceptance of the invitation of your president to address you upon this occasion. In a moment of vacillating indecision I yielded to a desire, which grows on one with age, to deny nothing to an old friend, and I had courage only to make the single condition that I might talk about what I pleased, *as* I pleased.

The opportunity to do this before such an audience as this can hardly come more than once in a lifetime, and I hasten to express my full appreciation of its value and importance.

Although the larger part of my life has been spent in educational work of one kind or another, I disavow all claim to speak as an educationist, in the sense in which that word is generally used, meaning one who understands the theory of education. Colonel Higginson, in his charming *Cheerful Yesterdays*, says that "probably, if the truth were known, nothing in the universe is really insignificant, not even ourselves;" and perhaps I may indulge in the belief that even my unprofessional opinions may be not entirely without value.

The paramount importance of popular education in a country like ours, the splendidly successful way in which you, with your colleagues and predecessors, have organized and directed the great system of public schools of which we are justly so proud, and the enormous benefits accruing therefrom, are matters concerning which we are all essentially agreed; and I am justified in assuming that it is not necessary for me to take from the hour which I have dedicated to fault-finding and complaint even a moment for the purpose of showing that I am, on the whole, in harmony with the prevailing public sentiment.

With little attention to logical order, with no pretense of entire originality or newness of thought or suggestion, without rhetorical accomplishments or felicity of expression, but with only an earnest desire to be clearly understood, I proceed to discuss certain phases of current educational theory and practice which the experience of more than a quarter of a century forces me to consider unsatisfactory, and which leads me to believe that some factors of importance in the educational problem are being neglected, and that some facts of moment are forgotten.

[1] By request of the author, the amended spellings adopted by the Board of Directors do not appear in this address. [See resolutions of Board of Directors adopted at Los Angeles meeting, July 13, 1899.]

It is but just to say in the beginning that, although the authority of the great body of school superintendents is dominant in determining the direction and relative intensity of educational currents, they are themselves in a large degree subordinate to a body of officials who in turn derive their power and receive their responsibility, directly or indirectly, from the people. Nor can it be denied that in some things, about which I shall make complaint, the superintendent is only executing the will of these officials, and not giving expression to his own views or mature judgment. As one of the factors which enter largely into the rather complex formula representing the integrated educational forces of a community, the board of education, school committee, or whatever is equivalent to these, may well receive first consideration. It represents the first organized authority in educational matters. The people from whom this authority is derived almost invariably and everywhere are honestly desirous of getting the best results possible from the money expended in the support of the public schools, just as the vast majority of people want good government for city, state, and nation. That they do not get the best that is possible no one will deny, and that this is due largely to their own negligence and indifference in the selection of their representatives in legislative bodies does not in the least alter the fact. The old — and, one may almost say, no longer respectable — aphorism, "The office should seek the man, and not the man the office," has recently been amended by the statement that the office which is compelled to seek the man is usually "not worth having." There was a time, within the memory of many of us, when the best men in the community were invited to serve as members of the school board; but that office has come to be "worth having" within the last quarter of a century, and now almost everywhere we hear of men "running" for it, spending time and money to get it, and urging the people to load them with responsibilities and duties of the character and importance of which they have no knowledge whatever. A good-natured people, accustomed to long-suffering without protest, too busy with the promotion of its own material interests to care much for the conditions under which youth is growing into manhood, finds it easier to select one of two or three self-nominated and self-recommended candidates than to stop attending to "business" long enough to seek out the man of character, integrity, and courage who, if thus sought, might willingly devote a large share of his time and energy to the promotion of the educational welfare of the community at large.

It is hardly necessary to ask, and perhaps still less necessary to answer, the question: "How does it *pay* to be a member of a school board?" Almost never is there any salary connected with the office, but it is continually sought by many whose interest in, not to speak of their fitness for, the duties which ought to go with it must be infinitely small. When we say, in these days, that an office is "worth having," we mean

that there comes with it, may be directly, may be indirectly, some material, tangible reward or advantage. What these rewards and advantages are in the case of school-board membership I leave you to determine from your own experience, or from the columns of the educational and other journals. Should you desire in certain instances very definite and precise information, it is openly declared that you may consult dealers in books, furniture, and other school supplies; agents for encyclopædias, dictionaries, wall maps, and air pumps; and it is whispered that something might be learned from members of your own profession. But it is by no means necessary that advantages which men seek in school-board membership should be of the doubtful character here implied. Indeed, it may be confidently asserted that those who make use of this office to achieve positively dishonest and corrupt ends constitute only a small minority of the whole. There is another class, however, larger and only a little less dangerous than this, including all of those who consider membership in a school board as the first step in a political career. There is no more noble aspiration, no loftier ambition, than the desire to become an able, incorruptible, fearless, honorable, and faithful servant of the people in politics. Such politicians are not increasing in numbers very rapidly, and we might well afford large sacrifices in their training, if we could be sure of the product, for we need them every day. The school-board politician is not usually greatly stirred by sublime sentiment, but rather by a longing to become the most influential member of his party in the ward or precinct in which he lives. As a member of the board of education he learns somewhat of parliamentary rule and practice; he has experience in making speeches; he controls the disposition of certain funds or directs certain enterprises, so that he is sought after; and he finds that, by conferring favors in what he believes to be a perfectly honorable fashion, he increases his importance, gains supporters, and becomes one of the political forces to be reckoned with by his party leaders. His service as the director of the most important, the most delicately organized, and hence the most easily injured function of municipal government, the education of the young, while it may not be positively corrupt, is positively harmful, because it is devoted solely to his own personal advancement.

One of the attendant evils of this state of affairs is the nearly universal tendency toward large numbers in school boards. If the office is "worth having," it is wanted by many people, and politicians find it to their interest to try to meet this demand by inflation. The principle of making up in quantity what is lacking in quality sometimes works fairly well, but not in this instance. There can be no doubt that, even in a very large city, a general governing board of five or six well-selected, suitable men, with leisure to devote to the work and an unselfish interest in it, would be infinitely more efficient than the large organizations usually found.

Thirty years ago it was my good fortune to be a teacher in the high school of the city in which we now are. There were six members of the board of education. All of them were men of admitted standing and importance in the town. Most of them were among its foremost citizens, and some of them were among the foremost citizens of the state and nation as well. No one of them expected to be a candidate for the common council, or had an ax to sharpen in ward politics. Nearly all were men of considerable leisure, which they gave liberally to the business of directing the public schools. Their work was done without fear or favor, and teachers in their employ soon learned that they were to be judged by actual results. This was not an unusual condition at that time; the same existed in many cities and towns in this and other states. It is pleasant to know that in some places the interests of public education are still in the hands of men of this type, but it has become uncommon.

Another consequence of the dominating influence of the aspiring young politician in school boards is a distinct tendency toward socialism or paternalism in all things relating to the management of the schools. The embryo mayor or congressman is generally fired with zeal in behalf of the people. His desire to do something for them often finds expression in some measure by which those who, by reason of industry, sobriety, and economy, have acquired something above the bare necessities of existence may be taxed for the benefit and relief of those who lack in some degree one or more of these sterling qualities. It is true that many honestly believe this to be a just and proper procedure, and it may be admitted that it is a question of drawing the line by the state in the exercise of its sovereign powers, to the end that, on the one hand, the state shall be benefited and, on the other, the citizen shall not be demoralized. To deprive the latter of the incentive to the acquisition of the practical virtues by nullifying the law that, to share in the harvest one must also share in the labor incident thereto, is to inflict upon him a lasting injury.

In my own judgment a considerable step in that direction is taken when the state undertakes to furnish free text-books for use in the public schools. And this practice carries with it certain other evils of no mean dimensions. It stands in the way, in many instances, of the formation of a small family library, of which the text-books belonging to the children in school constitute the nucleus. School text-books should be preserved with loving care by those who have used them. As books of reference in later years they possess a high value, due to familiarity with their arrangement and contents. I am sure it is a common, almost daily, experience with all of you, when in search of some bit of information which you once possessed, to go to the old book of your boyhood, rather than to the later and fuller texts which load your library shelves; for in the former you know almost the page and very spot on which it

may be found. The family which places side by side the school text-books of two, or perhaps three, generations is in possession of no mean equipment for historical and literary research, and, even if nothing else is owned, its intellectual outlook is in striking contrast with that of the household, too common in these days, owning not a single volume. When a child is provided with the necessary text-books at the cost of some sacrifice on the part of his parents or himself, he is in the way of learning a useful lesson as to the value of property and the importance of caring for it. The little regard which is had by all, old as well as young, for the property of the state or nation is proverbial, and there is hardly an instance of the administration of public funds which does not show wastefulness and extravagance, as compared with the cost of accomplishing the same results through private enterprise. There are also important hygienic questions to be considered, such as the danger of spreading germs of disease by the heterogeneous distribution of texts, or the indiscriminate chewing of lead pencils — incidents by no means uncommon under this system. There are other, equally good arguments against the free-text-book system, which I trust all who are inclined to favor such policy will examine before acting. In a state in which text-books are thus furnished I have discussed the subject with many teachers, and have never found one who distinctly favored it. The outcry that naturally follows any proposal to withdraw a privilege of this kind prevents a free expression of opinion on the part of teachers, and, because not much is said in opposition to it, it must not be inferred that it is approved. But its most serious aspect is as an index of the growing disposition to require the state to furnish everything and to do everything for the individual, who is in danger of becoming simply the passive recipient of benefits conferred. In the story of the life of almost any man of present distinction we are likely to find a sentence like this : " He struggled under the most adverse conditions to obtain an education, and courageously earned his own way through school, academy, and college." In the future we shall probably read : "He accepted without serious protest the educational advantages which the state thrust upon him, having been only twice arrested for truancy."

It requires courage — for which I hope I may receive due credit — to take up, in this presence, the consideration of the next great factor in the educational problem, which is the superintendent himself.

I will not take your time and mine to tell of the many excellencies of the superintendent ; of his devotion to duty under trying and unfavorable conditions ; of the prodigious influence which he has exerted, mostly for good, in the development of our educational system ; or of the high qualities and loftly purpose by which he is generally characterized. I wish to be understood as having said all these things ; but my present task is to find fault with him.

The position of superintendent of a group of public schools in city, town, or county is now too generally regarded as differing in no way from any other *office*, and the man who fills it is getting to be, in many respects, like any other city, town, or county officer. It is an office "worth having," and men "run for it," just as they do for other offices. That there is a legitimate candidacy for such a position no one will deny, but it is too often of the vote-seeking kind. It is not strange that, when the selection is in the hands of a modern board of education, questions of fitness by experience and scholarly instincts and tastes are largely secondary. Concerning what influences are sometimes effective in securing the election of a superintendent, and what manner of man he sometimes is, I need only refer you again to the educational journals of the day, in which, it may be assumed, all things are truthfully set down.

In the case of the special type at this moment under consideration, it is perfectly well known that, after he is elected, he devotes the better part of such ability and energy as he may possess, strictly in accord with the gospel of the times, in looking out for his re-election, when the time comes around again. If he would confine his efforts in this direction to the more commonly recognized methods, he might be, in a sense, harmless, or at least not positively harmful. Unfortunately, however, he sometimes attempts, during the interim, to do something for the schools. Unable to distinguish between notoriety and reputation, he seeks to do something original and startling, or, more commonly, to set up a bad imitation of something original or startling done by somebody else. Having looked about him to some purpose, he has discovered that there is nothing the educational world — that part of it which gives men notoriety rather than reputation — worships so inevitably as the current fad. Accordingly he dazzles his constituents and worries his teachers by running the whole gamut of modern pedagogical suggestion and invention. With no regard for relation or logical sequence he goes in for psychology, nature study, mothers' meetings, correlation, child study, Latin in the lower grades, science in the public schools, manual training, vertical penmanship, cooking, sewing, Spanish, etc., etc.—you know them all. It is true that he is often utterly incapable of understanding and appreciating whatever good there is in those pleasing educational diversions, but he must have to do with a very unreasonable board, indeed, if a judicious exploitation of such a list of novelties does not enable him to hold his place for several years.

It is a pleasure to believe, however, that this type of superintendent is not extremely common, and, what is more to the purpose, I fear I cannot reach him through this association. His more respectable brother, however, cannot be acquitted of some of the same faults, to a few of which I beg especial attention.

I object to the superintendent who is not himself a scholarly man.

I do not mean that he must be a man of learning, or a specialist in any department of learning, but that he ought to be a scholar in the broadest, best sense. It seems to be forgotten, in these days, that education is largely an intellectual process, and that an educator ought to be a man of intellect and an example of scholarly accomplishment for all of his subordinates.

I object to a superintendent who does not recognize scholarship (not learning, remember) as of the first importance in the selection of a teacher. The power to keep a school in perfect "order," that is, in perfect quiet, is too often regarded as an accomplishment of the highest kind. We have not entirely gotten over the idea of mere school-"keeping," and it is a curious, not to say amusing, fact that in some parts of the country there are teachers and principals of schools who prefer to be designated as "masters," and especially when the title may be preceded by the distinguishing adjective "head." There is no discoverable difference between the functions of a "head-master" and those of a principal, but a patron with an investigating turn of mind has found that it costs, on the average, about fifty dollars a year more to send a boy to a school ruled by a head-master than to one managed by a principal.

While the proper government of a school is a matter of much importance, the "order" may be perfect and the school an unwholesome educational desert, barren of anything making for moral or intellectual advancement. A "perfect disciplinarian" may be a treasure in the sense of causing little trouble to a superintendent whose primary object is to "get along," but a teacher *who can teach* is, after all, what we want.

That superintendent is blameworthy, from my point of view, who wishes to be an autocrat in the management of his schools, as well as that other who prefers to assume no responsibility. In recent years there has been a growing tendency toward autocracy. A theory of government has found favor, according to which much responsibility and power rest with one man. Dissatisfied with more democratic methods, recognizing the inferior quality and general untrustworthiness of their own representatives in boards of education, city councils, etc., the people have attempted, not to improve the character of these bodies by exercising greater care in their selection, but to render them more or less harmless by bestowing greatly enlarged powers, in the matter of appointments especially, upon executive officers, mayors, school superintendents, and others. They have been led to this course by the attractive cry: "Give him full power, and then hold him responsible." So they proceed to give him full power, and then busy themselves again with their own affairs, forgetting the other half of their contract with themselves.

Admitting that boards of education are by no means what they should be, it is none the less true that, as the representatives of the people, they ought to share in the responsibility for the success or failure of the public

schools. I believe it to be neither wise nor safe for a superintendent to have the absolute and unrestricted right of appointment and discharge of teachers. Superintendents are, at best, still human — some of them very much so; and the best of them is not likely to be absolutely fair and just in his estimates of the character and qualities of his subordinates, or entirely free from the possibility of having some of his opinions made for him by other people. Appointment and dismissal may well be made only on his recommendation, but by leaving the veto power in the hands of the board he will often save himself the mortification of a blunder, and at the same time insure a closer interest in the details of his administration. Such veto power is not likely to be exercised except in cases that may well require a revision of judgment on his part.

Even more blameworthy is the superintendent who exercises autocratic powers in dealing with his teachers. The teacher is the private soldier in the war against ignorance. He, after all, does the real fighting, and on his courage, loyalty, and unselfish devotion to duty we must put final dependence. It is worth noting that in the real battles of the last few years it has been discovered that under modern conditions men fight best in "open order." The compact, "shoulder-to-shoulder" organization, moving in machine-like obedience to orders, is no longer the ideal. The soldier in battle is again an individual; his general movements are, it is true, directed by one whose knowledge of conditions is more comprehensive than his, but with such restrictions he is given ample opportunity for the display of intelligent device, impetuous courage, and other qualities through which he may acquire distinction. In the rapidly increasing complexity of our educational systems we are largely ignoring the importance of individuality; indeed, there is a continual and strong tendency toward a sort of military organization, than which nothing can be more unfortunate. Dictation as to methods often descends to the most trivial details. If the superintendent is a narrow man, he is very likely to believe that there is only one way to teach every subject in the curriculum, and that is the way which has happened to project itself above his limited intellectual horizon. In how many instances are superintendents insisting on a certain procedure in teaching the principles of arithmetic, for instance? It is well known that in some schools it is required that one, and only one, explanation is allowed of how to find the least common multiple of several numbers, of why the divisor is inverted in dividing one fraction by another, and of other trivial details concerning which the teacher should be allowed absolute liberty of choice. As to the fitness of some superintendents to dictate in matters of this kind, I am reminded of one who had graduated into your ranks from another profession in which he had not been a shining light. Put in charge of the educational interests of a considerable town — city, I believe — not a thousand miles from this spot, he began what he believed to be his most important task, that of

teaching the teachers how to teach. His earlier exploits were in the field of elementary mathematics, and on one occasion, before a number of teachers to whom he was giving instruction in methods of teaching "fractions," he announced, with evident satisfaction, that since the last meeting he had made the interesting discovery that, if you wanted "to divide a fraction by a whole number and could not divide the numerator of the fraction by the whole number, *it would do just as well to multiply the denominator*."

He is a foolish, unlearned, and, indeed, unfit superintendent who does not know that there are many ways of doing the details of educational work, *all of which are good*, and that *one* always best which is voluntarily selected and enthusiastically worked out by the teacher. The modern educational reformer seems bent on coercing other people into a support of his own notions and fancies, trivial and petty as they often are; and this disposition often extends to large organizations and influential bodies of men. This very association which honors me tonight by listening to my lamentations has decided in advance that, even if its publishing committee should good-naturedly recommend, it will not publish my words unless I will agree to spell them in a fashion which I do not approve of. While fully recognizing their right to do this (using the word "right" in the now generally accepted sense of "power"), I say to myself that they have as much reason to prescribe that I shall wear a black or a white necktie when I read them, and I sternly resolve that I will consign my manuscript to the waste-basket or the grate rather than consent to an appearance of believing that *thru* spells "through," that *thoro* means "thorough," or that it is wise to do what one of these same reformers once described as "decapitating the tail off" of such words as "programme," "pedagogue," "catalogue," etc.

Seriously, we must not forget that the greatness and glory of this nation is to be attributed, more than to any other cause, to the large liberty of the individual. Under the beneficent influences of this liberty, men, regardless of circumstances of birth or station, fired by the divine spark of intellectual superiority, have striven, not to become like other men, but rather for individual distinction; and there has resulted a people never before equaled in capacity or in flexibility, and of such an enormous "elastic limit" that even the unparalleled stress to which we are just now being subjected will not strain beyond recovery. *This is a bad time, and the public school is a bad place, for the beginning of the extinction of the individual.*

My most serious quarrel with the superintendent grows out of his disposition to play havoc with established courses of study and methods of instruction in the public schools, not always for their betterment, as I look at it, and often resulting in their complete emasculation and impoverishment. There is a curious, but often intense, prejudice against

letting things go as they are, even when everybody admits that they are going very well. It is assumed that nothing is being done unless change is being wrought, or novelties introduced, and all must be of such a character as will catch the attention of the vacillating and fickle public. This opens the door to the exploitation of all sorts of whims and fancies, necessitating the partial exclusion or suppression of those more substantial and trial-tested subjects upon which earlier generations labored and grew strong. The very multiplicity of subjects now found in the public-school curriculum is bewildering to one who holds to the old-fashioned idea that education means moral and intellectual training and discipline, and that it can only come from earnest and courageous individual effort. In one scheme that I know of there are nineteen different subjects to be studied before the ninth grade is entered, including painting in water-colors, modeling in clay, etc. How can there be anything more than a touch and a go at each one of these? The prevailing desire of the time, in matters not educational, is to acquire without labor; to get something for nothing, or for as little as possible; and this is echoed in the public schools by the all but universal tendency toward making the path of the student as easy and comfortable as may be. If difficulties exist, they must be hidden, or they must be removed by the teacher, for the pupil has no time to make a sturdy struggle to overcome them himself. It is forgotten that the most important of all accomplishments is the ability to think clearly and reason correctly; that a knowledge of how to use books, and how to distinguish between real learning and quackery, is infinitely more valuable to the individual and to the state than a smattering of a dozen sciences.

Among the many recent additions to the course of instruction in the public schools, none is, apparently, more popular, with both school boards and superintendents, than the various forms of so-called manual training. A properly arranged series of exercises in the use of simple tools in the working of those materials which are of the commonest use in constructive engineering may, and indeed should, form a part, never large, in a well-selected group of studies; and if this alone were attempted, the result would be above criticism. But the history of education does not now exhibit a parallel to the reckless extravagance which characterizes the development of this fad, from its inception to the present moment. Large and expensive buildings, elaborate and costly machinery and equipment, involving in the country at large investments aggregating millions of dollars, all bear witness to the unthinking haste with which school boards and school superintendents threw themselves into this movement. I venture to say that even now an honest consensus of opinion, not intended for public consumption, would declare that the results are utterly inadequate and disappointing. Year by year we are becoming more ready imitators of European nations. We borrow without

adaptation from nations whose government and society are as different from ours as is possible, and yet some people are surprised that it doesn't work. We overlook the fact that the object of our system of public schools is to destroy, not to create, class distinctions, and deliberately set up a system which, if carried to its logical conclusion, means one school for the blacksmith's son, another for the son of the merchant, and perhaps a third and fourth for their respective sisters. Thus our schools can no longer be called "*common* schools," a name so full of wholesome liberty and democracy. Some miserable wretch a few years ago hit upon the term "enrichment." It was an attractive word, and he forthwith invented a new catch-phrase—the "enrichment of the course of study." The process of enrichment is now under full swing, and time alone can tell what the result will be. Naturally, the new crowds out the old, and, if it did not, the enrichment is of such a character as to deprive the pupil of all taste for or power over the plain, substantial, but often rather difficult diet which he was expected to digest and assimilate a generation ago. The cry of "too much arithmetic" is responded to by the practical exclusion of that part of the subject which so long furnished an unexampled training in logical processes and pure reasoning, the value of which can hardly be overestimated. In common with many others, I have always felt under the deepest obligations to the time-honored fish of my youthful days; that curiously proportioned fish whose tail was as long as his head and half his body. It was no mean intellectual performance to think him out from beginning to end, and with his traditional colleagues, the hungry bear and the ox who ate the grass while it was growing, he was the beginning of many good things among the youth of thirty and forty years ago. I am unwilling to believe that, in the matter of intellectual discipline and the cultivation of the reasoning powers, his place is adequately filled by lessons in sewing, water-color painting, or the wishy-washy chatter about nature study which one hears today.

Something must be said about the teacher; indeed, much may be said *for* the teacher, for he is largely the victim of other educational forces. In large cities he is too often deprived of all individuality, becoming merely a cog in a wheel which is itself one of a system of wheels all interlocking, for good or for ill, with the overruling policy of one man. Compelled to work out the ideas of others, he has little incentive to create for himself. But, however restricted his position, he enjoys much opportunity for self-cultivation, and this he too often neglects. He should be a scholarly man, a lover of real learning, gentle, good-mannered, and honest. Possessed of these qualities, neither school board nor superintendents could prevent his being, what we rejoice to think he very often is, an inspiration and guide to those with whom he is in daily contact. But sometimes he is so thoroughly trained in the principles of scientific pedagogy that he mistakes method for matter, and does not know the

shadow from the substance. A not uncommon fault is that of complaining of his lot, asserting at all times and everywhere that his reward is not what it should be, and that his position in the community, social and otherwise, is not what he deserves. There is a deep-rooted feeling among many teachers that in some way the community is largely indebted to them, over and above the stipend which it allows. In many cases this is undoubtedly true, but in no case does it justify the conclusion, unfortunately becoming more common in these days, that the teacher ought to be pensioned as is the soldier or the policeman. Such a suggestion is in direct conflict with the notions of liberty and equality which we are supposed to have inherited from our ancestors. No one is compelled to be a teacher; if teaching, he may quit at any moment, or leave his place for one more attractive or remunerative. His earnings, small as they are, are much in excess of those of the *average* citizen. His occupation, instead of being extra-hazardous, offers many and great advantages in the way of being wholesome and agreeable. Why may he not be expected to live in such frugality, thrift, and temperance as to insure his old age from want? In asking to become a pensioner upon the public treasury he throws away the dignity of his profession and offends its best traditions.

I cannot conclude without a few shots at the public high school, the "people's college" so-called. I beg to repeat that here, as throughout, I shall not attempt to praise, although great praise is due all along the line, and especially to those who have created and who are maintaining the splendid system of public high schools now almost everywhere to be found. But my business tonight is to complain, and abundant basis for complaint is to be found in the organization and management of these schools. Here can be seen, even in a greater degree than in the lower grades, the evils arising from "enrichment." The enormous advantage to the student of making him do a very few things very thoroughly — the intellectual power and scholarly habits which he thus acquires; the capacity for concentration of thought and effort, and the efficient control of his own faculties, which he thus gains — all of these, and other considerations of the first order, seem to be lost sight of in the building up of the four-years' course of study of the high school of today. Appropriate as may be the term "people's college," when applied to these institutions, its use has been, in many respects, very unfortunate. It has encouraged a tendency in the high school to adopt many of the practices and to assume many of the traditional customs of college life, and, as is generally the case, the imitation has not been of things most worthy, but rather of those nonessentials of college existence which are themselves, among colleges, becoming obsolete. The annual commencement exercises, the speeches of the graduates, the salutatorian and the valedictorian, the diplomas of parchment, etc., etc., are now all but universal. In many cases there are also the class-day exercises, with orator, poet, and

historian ; the baccalaureate sermon, receptions, hops, and the junior promenade in the middle of the year — all accompanied by a certain amount of hazing and other scholarly diversions.

I have not yet heard of a high school granting bachelors', masters', or professional degrees, but I presume this is due to the fact that in most states a special charter from the legislature is required before this can be done.

I am by no means of the opinion that all of these things are harmful and should be done away with. I cite them as an example of how difficult it appears to be for us to be discriminating and temperate in anything. It is our great misfortune as a people that *we cannot drink without getting drunk.*

But the high school is also unfortunate in attempting to imitate, in a very large way, college methods of instruction. These methods are assumed to be adapted to adults ; to persons of maturity ; to men and women. They must necessarily be unfit for boys and girls, rapidly growing, it is true, but still children. No end of harm has been done within the last fifteen years by the neglect of this principle. This, taken with the large "enrichment" of courses of study, has often resulted in a shallow pretension of accomplishments ; a veneering of scholarship, and an immature dilettantism which would be ludicrous were it not pathetic. To illustrate: For many years I have been in the habit of asking young men concerning the text-books which they have used in the high school or academy. Not one in ten has been able to tell me the names of the authors of these books. Even the elective system, which by many is still regarded as an experiment in colleges, is now quite common in high schools, and in at least one large and important school it is adopted absolutely without limitations, pupils between the ages of thirteen and eighteen being allowed to take up any subject they choose, and put it away again if at any time, for any reason, it may become distasteful to them.

One of the most important advances in higher education during the last twenty years is the introduction of the laboratory method of instruction. High schools were quick to follow in the wake of the colleges, and in too many cases to their serious detriment. In a modified and restricted form the laboratory method can be made of great value in the secondary schools, but its use must be very restricted, and it should never be trusted to a teacher not thoroughly scholarly by instinct and training. In one important particular the high schools are very often undertaking what the best-equipped college would not dare. They are assuming that a child may wisely undertake to develop the fundamental principles of a science by experiment and observation in the laboratory and in the field. They have been encouraged in this view by normal-school instructors and other professional educators. There was never a greater fallacy. Probably there is not a reputable college in the country in which the

professor of physics would venture to put students into the laboratory before they had acquired a good knowledge of the general principles of the subject by a course combining text-book and lecture; yet this is not an uncommon thing in high schools.

For these reasons, in schools of engineering and of pure and applied science, in which, I am bold enough to affirm, genuine intellectual discipline is more quickly recognized than elsewhere, and more rigorously demanded, there is great and growing dissatisfaction with the work of high schools and academies. Too many students have come from them entirely lacking in intellectual virility, enfeebled by the mental dissipation to which they are practically driven by the recent "enrichment" of the courses of study. Two or three years ago some of the leading scientific and engineering colleges in New England made an effort to agree upon common admission requirements. During the conferences there developed a condition well worthy of your attention; it was that, while all agreed that at least one natural science should be on the list of required subjects, the physicists were not willing that it should be physics; the chemists were not content that it should be chemistry; and, at last, there being no botanist on the special committee to which the matter had been referred, it was agreed to make it *botany*. Both physicists and chemists declared that they preferred to start afresh with their subjects, rather than accept the results of instruction in preparatory schools, which was generally deficient in sound, fundamental principles.

It is but justice to say that many of the things herein complained of have come to the high schools through the influence of colleges and universities, for admission to which they prepare a small fraction of their students. I have always maintained, with many others, that the high school should be absolutely independent of the demands of higher institutions, and that their courses of study should be arranged without any reference to college-admission requirements. In the state of Massachusetts, according to the statistics of the secretary of the state board of education, about 4 per cent. of the number of students in attendance in the high schools of the state annually go to the higher institutions, and it is presumable that no other state can make a better showing. In these schools the demands of the colleges are dominant to a degree entirely disproportionate to the number of students who enter them. For instance, according to the same authority, 40 per cent., nearly one-half, of the entire cost of maintaining high schools in Massachusetts is expended in teaching languages other than English — practically Latin, Greek, French, and German. This is four times as much as is spent for teaching English, and about as much as the total cost of instruction in mathematics, the English language, and the sciences.

If only courage were not lacking, the high schools would have no difficulty in asserting their independence and in giving their courses of study

a logical relation to what precedes rather than to what follows, a condition of things demanded alike by reason and by the best interests of the public schools.

In all of this I sincerely trust I shall not be set down as an obstructionist or a common scold, or as one who does not believe in the possibilities of development, growth, and improvement in education as well as other things. On the contrary, since it is in the education of the people that we shall find the most potent factor in the evolution of the race, I make my plea for a judicious conservatism in the conduct of our great educational interests. Let us not follow the example of the inexperienced, yet self-satisfied sailor, of whom we have all heard, who was put in charge of the wheel for the first time on a bright, starry night and told to keep the ship directed toward the North Star. On returning to the deck in an hour or two the captain was astonished to find the North Star astern. But this situation the sailor easily explained, saying: "Why, captain, we passed that star long ago!"

ROUND TABLE OF CITY SUPERINTENDENTS

CONDUCTED BY J. P. SHARKEY, SUPERINTENDENT OF SCHOOLS, VAN WERT, O.

PROMOTIONS AND GRADING

FIRST PAPER

BY W. W. CHALMERS, SUPERINTENDENT OF SCHOOLS, TOLEDO, O.

There has been so much said upon this subject within the past two years that I feel like offering an apology for its introduction here this afternoon. I gave a paper upon this subject of grading and promotions at a meeting of an educational association at Tiffin in November, and, in response to a request from the chairman, I am before you today. I desire to say that in what I shall offer upon this subject you will readily see that I present nothing new. There will probably be something new in combinations.

I am not one of those who believe that the plan of grading schools and the promotion of pupils is the most important problem which presents itself to a school superintendent. The plan of grading and promotions has to do with the machinery of school administration, and has, therefore, not enough life in it to be of paramount importance. It seems to me that some superintendents in this country for the past few years have given undue prominence to this subject. They have magnified this one part of a superintendent's work until it has obstructed their view of the weightier matters. A superintendent of schools is the responsible representative of the manifold educational interests of the community he serves. He must watch all sides of his field; the plan of grading is one; the floor plans of his school building, heating and ventilating, statistical reports, reports of work, courses of study, and many other considerations should receive their due attention. But they all

belong to the machinery of school administration, and should be given only the minimum amount of attention to keep them in smooth running order, and the maximum amount of thought should be given to the heart and soul of the whole thing — the boys and girls.

You may say: "Then why occupy our time and attention with a matter which is regarded as of minor consideration?" My answer is this: Until a school district has in operation a rational, flexible system of grading, it is of vital importance. Until your district has in force such a scheme, there is no subject which I could call to your attention that could be of more interest to your pupils, teachers, and patrons.

I take it for granted that all here are in favor of a class interval of less than one year. The yearly-promotion plan, with its annual official examination to determine the ability of pupils to pass, represents one extreme of the question under consideration. The other extreme is represented by individualism in education. I assume that we are all of the opinion that the happy solution of this difficult problem in school administration lies somewhere between these two extremes. What I shall say to you on this subject is only my present belief. It is the best solution I can offer at this time. I believe in the plan I shall propose to you, because I have used it and found it helpful. I do not say it is the best, because others are succeeding with a different plan.

Any plan of grading which is based on the requirement that just so much ground must be covered in a given time with a fixed degree of thoroness is wrong, but I have come to the belief that it is compatible with good school administration to ask a given grade or class to cover a given portion of a given subject in a given time, and that this can be done without becoming enfeebling to the so-called brightest third or discouraging to the dullest third in the class. The mistake comes when we require all pupils to cover the grade outline with the same degree of thoroness. Let the brightest third, the middle third, and the dullest third cover the grade work in a given time, and let the outline be planned for the brightest, rather than the dullest, division of the class. A wise reclassification of pupils is needed at the end of the grade; and this brings us to the main question under consideration: When and how shall this reclassification be made? The *when* has to do with the length of the class interval, and the *how* with the manner of reclassification. I shall give you my own experience upon these points and the conclusions I have drawn, based upon that experience. I have worked with the yearly interval between classes, with the half-year interval, and have done some experimenting with the quarter-year interval, and with even less divisions; but in a city system of schools I am most heartily in favor of the half-year interval in the essential subjects in the elementary course, and the yearly division in the general-culture and the manual-culture subjects. A shorter interval than the half-year dissipates the energy of the teacher, results in an almost ungraded school, and eliminates the possibility of training pupils along the line of the culture side of an education. I think, however, in the beginners' grade, or the first half of the first grade, the classes or sections should be only six, eight, or ten weeks apart. This I call the "probationary grade." Some pupils can be promoted from the beginners' to the first grade in two or three months, and some require a year to prepare them for first-grade work.

When the class interval is settled, the question is then reduced to the considerations: (1) how pupils may be promoted at stated times, or at the end of the grade period; and (2) how pupils may be promoted in term. It seems to me that the best possible answer to the first question is to leave the whole matter of the promotion or non-promotion of a pupil to his teacher and principal. It is desirable for the superintendent to lay down certain general rules, such as: no pupil who has been regular in attendance and effort shall be required to repeat a grade more than once; but the teacher who knows a pupil's proficiency in the preceding grade should be the one to pass upon the question of advancement. Her decision should be based upon the pupil's class history, both written and unwritten, his effort, age, health, heredity, daily work, tests, etc. In regard to the second point under consideration, a plan for the promotion of pupils irregularly or during mid-term, there are several matters that require careful thought: (1) mental capacity of pupil;

(2) health; (3) bent, including industry and ambition; (4) age, and (5) home environment. Some cities maintain an ungraded room in the buildings, where backward pupils and pupils who cannot be readily classified are placed until they are fitted to enter a regular class. Here, too, are pupils who are preparing themselves to skip grades. Four years ago I recommended to the board of education the establishment of ungraded rooms in the large buildings in each section of the city. The plan was not only to offer an opportunity to do this ungraded work, but that the pupils of the regular grades who show more working capacity than the course covers be given an opportunity to do supplementary work in this room. I have since modified my views upon the necessity of maintaining the expensive ungraded room.

In Toledo we have a supplementary course in German, and maintain a German room whenever there is any demand for the work. We have also adopted the plan of supervising principals. It seems to me that some of this supplementary work and all of the so-called tiding-over work should be done by supervising principals and the regular teachers. At the opening of this school year we made a half-year division of classes in all so-called essential subjects, and continued the yearly unit in the general- and manual-culture subjects. We have combined with this semi-annual promotion scheme some of the advantages found in the spiral or longitudinal plans of covering grades. This permits pupils to double their grades without missing a single page of the course.

The plan is this: Our unit is five months. In the essential subjects we cover the work in four months and give one month for review. The bright pupils from the class below join the higher class in the review, and thus cover two semesters' course in one without missing any of the work. I feel very much encouraged over the outlook for this plan. We now have our schools thoroly organized upon the half-yearly promotion scheme. The classes are well balanced. Because of this plan of grading, about six thousand pupils have gained a half year. This is the same as three thousand pupils gaining a whole year. This means three thousand years gained to the community, to be added either to the school life of the pupils or to their business career. This means much to the educational and commercial interests of the city. It also has an important bearing upon the question of school taxation. It is a great saving in dollars and cents to the taxpayers.

Our plan is not to hurry pupils thru the school course at a break-neck speed, but to give pupils the utmost freedom in their advancement, that they may go fast or slowly, depending on their age, health, regularity in school attendance, industry, and ambition.

The question under consideration is strikingly American — American and twentieth-century. It is an index of our national type. The craze for speed is on. Reduce restraint and friction to the minimum, is the sign of the dawning century. Every effort to stem the tide or resist the accumulated force of the age means to be crushed under the wheels.

Let me say in conclusion that this or any other plan worked out by a board of control will stand or fall, succeed or fail, depending entirely upon its execution. The whole matter reverts to the central consideration in all school administration: the teacher makes the school. The conclusions drawn from a consideration of this question turn upon our concept of the end of education. If one's idea of the end of education is to receive high marks and pass grades, his line of argument would differ from that of the one who believes that the end of all education is to fit for life, to so train and educate both body and soul that a pupil will live up to his greatest possibilities. I believe that it is possible for a given class, that has completed creditably the eighth grade, to repeat the eighth grade with Miss A as a teacher, and be better fitted for its life-work than to be passed on to the high school for one year and be under the tuition of Mr. U and the Misses X, Y, and Z. I make this statement that you may know how much importance I place upon a promotion card.

SECOND PAPER

BY PAUL A. COWGILL, SUPERINTENDENT OF SCHOOLS, LAPEER, MICH.

It has been a noticeable fact that, whenever we have found a time-honored custom or manner to be in fault, there have immediately sprung up those who have gone to the opposite extreme as the only true solution of the question; and while I truly believe that we have reached that point in our educational progress where we can safely say that the yearly-promotion scheme does not satisfy us, I just as certainly believe that we shall make a still greater mistake if we follow Paul W. Search and others in their reckless plunge to the other extreme of individualism.

Indeed, it has been my experience that any interval shorter than the half-year results in needless waste of time to the pupils and additional work for the teachers; in fact, it tends toward all the disadvantages of an ungraded school.

This situation, however, still confronts us that, altho we may arrange our course of study so that the majority of our pupils will require eight years to pass from the first grade to the high school, there will be a few who will have to spend eight and one-half, nine, or ten years on the same work, and others who will be able to finish it in as few as five years.

I cannot agree with many who think it necessary to overthrow our entire educational system for the sake of these few, yet it would be very desirable if some simple arrangement could be made by which punctuality, attendance, good habits, and additional work might be rewarded by unrestrained advancement.

In connection with this subject I have read with great pleasure the plans used by Dr. Prince, of Cambridge, Superintendent Van Sickle, of Denver, and many others. Of these, the plan suggested by Superintendent Chalmers, of Toledo, seems the most practical solution of the problem.

It is, in brief, as follows:

Their term's work is five months. In the essential subjects they cover the work in four months, and give one month for review. The brightest pupils from the class below will join the higher class in the review, and thus cover two semesters of the course in one without missing any of the work.

To this plan I should like to offer a single amendment. When we take out from the last month of each half-year the time given to examinations, promotional exercises, etc., there will be but barely three weeks left in which to review the work of the term, and if these pupils are able to complete the half-year's work with the advanced class in three, or even four, weeks, the first term's work cannot possibly employ all of their time and energy for four months. Would it not be better to extend this month of review over the entire five months, using the last day of each week or of each second week for review? Supplement this with one or two weeks' additional review at the end of the term, and we shall not only have given these brightest pupils the one month in which to complete the work, but have allowed them to use in addition any time during the entire half-year that they may have at their disposal after having satisfactorily prepared each day's work of the lower grade.

The criticism of this plan that at once presents itself to you is that it will be difficult for the teacher to arrange her work so that a review may be profitably taken each fifth or tenth day. In answer I will say that the success or failure of whatever plan you may try, be it in this or any other line of educational work, will depend almost entirely upon the amount of earnest, conscientious effort put forth by your teachers.

THIRD PAPER

BY H. E. KRATZ, SUPERINTENDENT OF SCHOOLS, SIOUX CITY, IA.

It is not my purpose to present to this body any definite system of promotions and grading. My experiences along this line lead me to the conclusion that there is no one plan that can be called best for the various systems of schools.

There are two extremes which we meet in this discussion. On the one hand mass, or class, teaching, and on the other, individualism. Each plan has its advantages and its disadvantages; each its marked excellences and also its serious defects. Discussions over these two leading ideas as to which should chiefly govern in promotions and grading have, in consequence, become vigorous, even virulent at times.

On the one hand, the individualist, seeing only the serious evils arising from an inflexible system of grading, seeing only the tyranny of mechanism which possibly may characterize a few unprogressive schools in this country, but certainly not the large majority of them, rushes into print and bitterly denounces the crime that is being committed against the school children everywhere by the "lock-step" system. On the other hand, the advocate of class teaching, seeing only the possible evils arising from individualism, seeing only the possible disorganization of all system and order, and the evils of the ungraded school rolled back upon us again, in turn denounces the individualist as possessing anarchistic tendencies, which threaten to overturn our entire school system. The general public, reading the severe criticisms set forth by these extremists, becomes alarmed, and is convinced that our schools are in a deplorable condition, when the fact is that the alarming conditions, as a rule, only exist in the lively imaginations of our agitated, but ill-advised extremists.

Permit me to give an example of this. At the last meeting of this department, held in Chattanooga, a superintendent stated that only fourteen schools of Iowa had a class interval of less than a year, when the facts disclosed, by an investigation of fifty of the largest school systems of Iowa, that forty-four out of the fifty had an interval between classes of a half year or less.

My contention is that we ought to be able to carry on this discussion as to the relative merits of class teaching and individualism (and there are meritorious features in each) without conveying the erroneous impression that our schools are in a highly deplorable condition. Our schools, unfortunately, have enough sins to answer for without, wittingly or unwittingly, charging them for sins of which they are not at present generally guilty.

I believe that those rushing toward extreme individualism are losing sight of some of the advantages which may fairly be claimed for class teaching. Leading educators rightly hold that the child is to be trained so that he may be able to meet the demands of the civilization of which he is to become a part; that he is to be fitted, as a social being, for institutional life; that school life should, as nearly as possible, parallel the larger life which he is to take up when he leaves the schoolroom. Class work, where he thinks, discusses, competes, contends with his fellows, is in the highest degree essential to his achieving success in that larger life beyond the schoolroom where competition is so keen and intense.

Criticisms here should be tempered with justice and moderation, because every superintendent must provide for conditions which in some directions are peculiar to his city. The superintendent who lives in a densely populated city, with large school buildings, can arrange his classes with half-year, quarter-year, or even a few weeks' intervals without encountering any serious difficulties; but, should he attempt such close classification in a thinly populated city, or in certain thinly populated and somewhat isolated districts, he would encounter more serious difficulties than those from which he was attempting to escape.

In conversation with many of the leading superintendents of the country I learned that, while nearly all had some form of the half-year or less interval, yet each city-school system had its own method of working out its modifications of that plan. I venture the assertion that but few superintendents of this country can be found whose eyes are not wide open to the serious evils which grew out of the inflexible system of grading which has prevailed, and are engaged, in various ways best adapted to their peculiar conditions, in remedying those evils, thru a combination of the best features of both individual and class teaching. The exact extent to which each of these ideas should be incorporated into a city-school system, in order to secure the greatest efficiency, can be determined only by the superintendent, who is familiar with all the conditions under which the promotions and grading are to be done. To criticise indiscriminately and in a wholesale way, as the extremists are inclined to do, any system of schools which does not make strikingly prominent either rigid classification or extreme individualism is neither wise nor intelligent.

DISCUSSION

Superintendent A. K. Whitcomb, Lowell, Mass.— It seems to be assumed by most of the speakers that semiannual promotions, if permitted in any part of the course, must necessarily be continued thru the whole, including the promotions to and thru the high school. Theoretically, indeed, this would be the case, but in practice there is no need of it at all. It is true that a class entering a grammar school in the middle of a school year would, if it kept company front thru its whole course, necessarily complete its work there in the middle of some other year; but, as a matter of experience, such classes always break up easily, some pupils gaining a half year and some falling back a half year, long before the course is ended. We have had semiannual promotions in Lowell for twenty years in the primary and grammar grades, and an annual promotion to the high school, with no practical difficulty at all. Indeed, most of my grammar masters break up the February, or mid-year, classes they receive from the primaries sooner, rather than later, than I wish.

For mitigating the evils of close grading I am very favorably impressed with the plan presented today of allowing a part of a class to go on with advanced work when the rest stop for reviews. Without the use, however, of any formal plan whatever, of which I have studied, with more or less care, at least a score, we have secured by individual promotions, as the result of constant sifting by intelligent and interested teachers, about as many changes as seem to me to be desirable. Of the 351 pupils who graduated from our grammar schools last year, 195 completed the course in less than the prescribed time, of whom 133 did the nine years' work in eight, 51 in seven, 10 in six, and 1 in five.

In conclusion I wish to assert that the evils of the graded system, tho doubtless real, are far less than platform educators are wont to assert. That children entering school together differ widely in ability, in ambition, in health, in regularity of attendance, and a dozen other ways, is obvious, and that the holding of such children together for eight or nine years in one compact, unbroken mass would be an injury to many is undoubtedly true; but no children ever were so held together in any school of which I have had knowledge. There is, too, always a difference of more than one year in the real attainments of the members of any class graduating from a grammar school, and the leaders of such classes rarely appear to have lost power or interest because of their position, nor have the pupils at the other end of the class failed to get a reward for their work fairly commensurate with their abilities. Add to this the shifting of positions which always takes place thru individual promotions and demotions, and the evil shrinks from a most imposing bugbear to very modest proportions indeed.

Superintendent J. N. Study, Fort Wayne, Ind.— In answer to the question from the rear part of the room as to whether or not promotions into the high school semiannually make necessary semiannual graduations, I can speak from fifteen years' experience with semiannual promotions, and say that semiannual admissions to the high school do not necessarily involve semiannual graduations therefrom. The class coming into the high school at the middle of the school year can easily be given work that will occupy a half year of its time and enable it to have credit for a half year's work in some three or four subjects. Thus, for instance, without materially burdening the teaching force, the incoming class may be started in algebra, may take physical geography, may enter a class in American or English literature, and may take work in composition and such other special work as is provided; or the course may be so arranged that a science study, occupying a school year for its completion, may be started at the beginning of the second half-year, in which case the incoming class may enter along with those who entered the school at the beginning of the first half-year. Of those entering at the middle of the year some, who are above the average in physical and mental ability, will be able to take an additional study each term, and complete the whole four-years' course in three years and one-half, and graduate with the class entering a half year earlier than they entered. Some, who are not so strong physically or mentally, are all the better for having four and one-half years before them in which to do

the regular four years' work, and will gladly drop into the class entering just behind them. Should any of the class, however, finish their work in the middle of the year, and receive credit for all the regular work of the course, it will be easy for them to take some additional work in subjects that do not regularly lie in their course of study, and thus extend their course, or perfect themselves in something in which they have not been very strong. It is a matter which really presents very few practical difficulties, unless the teaching force of the high school be so scant as to preclude the organization of about two new classes at the beginning of the second term. Of course, when a high school reaches the size that the incoming class at the middle of the year is sufficiently large in numbers, and remains sufficiently large thruout the course, to form one or more sections of itself, then it becomes necessary to furnish teaching force sufficient to take care of it by itself all the way thru and institute semiannual promotions in the high school itself; but even in this case semiannual promotions in the high school do not necessarily imply semiannual commencement exercises. This is a matter that rests entirely with the school authorities. If they wish to have two commencements a year, they can do so, or if they wish to have but one commencement each year, then those who finish the required course at the middle of the year may take postgraduate work for the remainder of the year, or may stay out of school and come in and take their diplomas with the class graduating in June; or, in case anyone should remove to some other place, his diploma may be given to him without formal exercises. In all cases where the high school is of sufficient size to warrant semiannual promotions thruout the whole high-school course it is decidedly beneficial to keep them up, as many a pupil is thereby enabled to save himself a year's credit by being turned back at the middle of the year, when to go on, under the annual system, would mean a loss to him of a whole year's credit in some particular branch. This is one of the subjects in which the theoretical difficulties are much greater than the practical difficulties.

COURSE OF STUDY FOR PUPILS WHO CANNOT COMPLETE HIGH-SCHOOL WORK

FIRST PAPER

BY J. M. BERKEY, SUPERINTENDENT OF SCHOOLS, JOHNSTOWN, PA.

[SYNOPSIS]

Under an ideal system of public education there would apparently be no need of a discussion of this subject. In theory, a public high-school course, or its equivalent, is essential to the evolution of young life, and fundamental to a high degree of successful living in any department of labor and service. No convention of workers in and for the public schools would entertain for a moment the proposition that high-school privileges should be limited to certain classes or conditions. To do so would be divorcing the public high school from its rightful relation to the general system of universal education, and denying to it its legitimate function as a factor in the development of a common, intelligent, and useful citizenship. As a part of the free-school system, the high school must assume to be a common good to the common people, open and free to all alike who under the law become the educational wards of the state. Under ideal conditions, therefore, all pupils should have, and would have, a well-rounded, properly adapted, and fully completed high-school course.

But, in the words of the man of destiny, "it is a condition, and not a theory, which confronts us." There is a higher law than the law of ideal development under possible conditions. It is the law of the greatest good — not to the largest number, merely, but to the individual under present and pressing environment. What is the best for the boys and girls, as we know them in our crowded city schools, as we find them in our city homes, as they leave our schools early — very early — to furnish the brawn, if not the brain, of the ceaseless and grinding industries in the great centers of population? What is the best course of study and training for these young people, here and now, to the end that we may realize, in and by them, the highest and best in the future citizenship of the commonwealth and the social fabric of the home community?

We know, as a matter of fact, that the pupils in our primary and grammar grades do not all enter the high school. Superintendent Kendall, of New Haven, Conn., published a year ago statistics gathered from the official records of over two hundred cities thruout the United States, showing, among other things, that the number of pupils in the high schools, as compared with the whole number of pupils enrolled, varied from 4 to 12 per cent., with a general average of about 9 per cent. Assuming that the length of the city course of study is twelve years — four, or one-third of the number, in the high-school course — there ought to be, upon the ideal theory, one-third of the whole number of pupils, or at least 30, instead of 9, per cent., in the high schools.

If it be true, then, as the records fully justify, that only one pupil out of three or four who come into our elementary schools subsequently enters the high schools, is this course of study which aims to prepare for the high school; that, as a rule, permits no deviation; that allows no special or optional lines of work; that affords no good stopping-place short of high-school graduation; is this the best course for the two-thirds or the three-fourths who cannot — or, at least, who do not — get beyond the grammar grades? This is the vital question at issue in this discussion.

I am persuaded that it is not the fault of the superintendent or the teacher, and that it is not the course of study which is responsible for the non-attendance of pupils in the higher grades. It is simply the result of conditions which can be overcome only thru the evolution of a higher civilization, and a more universal appreciation of the use and the value of a scholastic training for all the purposes of successful living. To this end, as a matter of course, the public-school friends and forces must largely contribute. But while we thus complacently relieve ourselves of the responsibility for certain conditions and results which we know are not as they should be, there are other conditions and results, which grow out of the course of study and its proper application, for which school officials and teachers are directly responsible. There is that in the application and the adaptation of the principles which underlie an elementary course of instruction which can and will do much for the class of pupils that never reaches the high school. While it is true that many pupils leave school because they cannot help it, there are many — very many — who leave because they become discouraged, indifferent, stubborn; discouraged, because the work is too difficult; indifferent, because they were not promoted with their class, or else they regard the class work as simply so much dull routine for the sake of drill, rather than productive of practical interest or immediate and tangible results; stubborn, because, for lack of a better motive, the teacher or the parent says, "You must." The truants from the schoolroom are not always the dull or the do-less, not the vicious or the hopeless. They are very often the naturally apt and ambitious pupils; but because they find the work of the schoolroom so much in conflict with their natural inclinations and activities, they will yield to the first, and very often the only, opportunity to escape from its exacting and unvarying routine.

While other forces may hold and help these pupils who are apparently predestined never to complete a high-school course, let us notice some features in the course of study that will, I believe, give to these the most and the best it is possible for them to obtain from the public school. And, while reaching out for this class of pupils, I would not in any way interfere with the rightful course of training for those who are pushing straight forward to the high school in regular order.

In the first place, the grammar-school course should be rounded and complete. Such a course should mean to the pupil and to his parents a well-balanced and well-rounded common-school education; such a course as is contemplated by the general law as the common heritage of every child in the state. Such a course would necessarily include a carefully selected and wisely directed course of reading and literature, the study of state history and government as a complement of national history and civics, a year's work in algebra as the complement of practical arithmetic and concrete geometry, the essentials in business forms and simple bookkeeping, the elements of vocal music and

drawing, together with the subjects generally included and required in every elementary school.

The end in view in such a completed and supplemented course of study for the grammar school is twofold, viz., as a preparation for legitimate high-school work under the departmental system, and at the same time to offer to such pupils as may not enter the high school at all the opportunity to accomplish a certain amount of work which when accomplished, shall afford them the stimulus and the encouragement of definite and recognized scholastic attainments. Whatever the form, there should be a recognition of the completed grammar-school course. This certificate of attainment will not only serve as a passport to the high school, but will also be an honorable discharge for those who have worked and waited and struggled to reach this point, when they felt that they could not reach anything higher.

Let me anticipate here a probable objection to this extended grammar-school course: Would it not require more than eight years for the pupils of average ability? I answer frankly, yes. But what law of nature or of pedagogy fixes eight years for the grammar-school course and four years for the high school? Why must it be so? I do not believe that the high-school course need necessarily be four years, any more than that the grammar-school course should be limited to eight years. It is worthy of note that quite a number of cities, having a ten-months' school term, have but recently expanded the standard grammar course to nine years, but have made the system of grading and promotions sufficiently flexible to permit the stronger pupils to complete the same work in eight, or even in seven, years. But the larger number of pupils, even tho a little slow, are allowed to move with their grades in regular promotion. Such a plan gives special stimulus to the ambitious and the strong, and yet leaves no room for discouragement to the pupils less fortunate in mental endowment or physical vigor. In Cambridge, Mass., the pupils are classed at the end of the fourth primary year, the stronger to reach the high school in four, and the weaker in five, subsequent years of study. The point I make, therefore, in favor of pupils who cannot complete high-school work is this, viz., that the system of grading shall be sufficiently flexible to give them standing room and recognition, without crowding them with overwork, on the one hand, or discouraging them with non-promotion, on the other.

Again, the course of study, below as in, the high school should permit optional studies and special lines of training. Manual training may take the place of mental arithmetic or United States history for pupils who are "born short" along certain lines. Domestic science or mechanical drawing may fill a minimum requirement for those who cannot or ought not to take the maximum course. One course of study coming under my notice has three years of optional or special work below the high school, not necessarily for the dull or the slow pupils, but to meet the constantly increasing demand for special lines of training. My plea in this connection, however, is for all possible optional and varied lines of work in advanced grammar grades that local conditions and school facilities will justify, to the end that larger opportunities and a more helpful training may be given to those young people who cannot, and perhaps ought not to, cross the threshold of the city high school.

I could not if I would, and I would not if I could, lay down any fixed or definite course of study for such pupils. That is the problem of the local management, guided only by this one common, fundamental principle, viz.: the schools are for the children, and to their highest good, individually and collectively, all systems of management must bend and all courses of study must conform.

SECOND PAPER

BY J. W. CARR, SUPERINTENDENT OF SCHOOLS, ANDERSON, IND.

Before attempting to discuss the course of study for pupils who cannot complete the high-school course, I wish to outline briefly a course of study that I believe should be offered to *all* high-school pupils. This should consist, in my opinion, of English (including literature and composition), mathematics, history and civics, science, Latin, German or some other foreign language, each continued from three to four years. In addition to these I would add music and drawing, some commercial studies, manual training for boys, and manual training and domestic economy for girls. These various subjects should be arranged into a number of different co-ordinate courses, and pupils should be allowed to choose from the whole, under the guidance and direction of parents and teachers. In this way individual tastes and abilities may be consulted, and the sexes and classes have a high-school course of study suitable to their needs.

Pupils cannot complete the high-school course for various reasons, of which the following are the most important: (1) because they have not the physical strength or the mental ability to do the required work; (2) because they lack the industry and perseverance necessary to complete the course of study; (3) because they cannot remain in school the required length of time.

Now, I believe that the arrangement of the course of study for *all* pupils, as outlined above, will meet the requirement of pupils who cannot or will not complete the high-school course. To this proposition I now invite your attention.

The first class of pupils — those that are physically or mentally unable to do the required work — should not only be permitted to choose the subjects they will study, but they should also be allowed to take fewer studies at a time than are required of the average pupil. If they are unable to do passable work in a subject, they should be permitted to try something else, rather than remain an indefinite time endeavoring to master something which is beyond their strength or ability. With such freedom and privileges, the maximum number of pupils of this class will remain in school the maximum length of time, thus receiving the largest benefit possible. Encouragement, guidance, freedom, and time are the things most helpful to these.

The treatment of the second class — those who cannot, or rather *will not*, complete the high-school course for lack of application — should differ somewhat. They should be given freedom in choice of subjects under the direction of their teachers. Then, if they have the right kind of teachers and a variety of subjects from which to choose, many pupils of this class will show interest and perseverance, who otherwise would simply drop out of school. Such pupils should be required to do a required amount of work daily, and should be held to a strict account for the excellence of the same. They should be encouraged, yes urged, to do their best; and, above all, they should not be allowed to idle away their time. Many pupils who do little or nothing in the traditional high-school subjects have been found to do excellent work in the manual-training school. They became interested in school work and made marked improvements in other subjects. Again, freedom of choice and elasticity in the course of study are found to be beneficial.

But little in addition needs to be said concerning the third class — those who cannot remain in school long enough to complete the high-school course. For them also I believe the system of electives to be the best. This enables pupils who can remain in school but a short time to choose those things which will be most beneficial to them in fighting the battles of life in which they are about to engage. The traditional disciplinary subjects — Latin, Greek, algebra, etc. — are excellent for the mind, but these may not be the subjects that are most useful to the boy who can remain in school but one or two years. English, commercial arithmetic, drawing, bookkeeping, history, and

manual training may be the ones that are most helpful and needful to him. If so, let him take them. If the work is well done, the mental discipline will take care of itself.

So far I have spoken of those only who are in the high school. But it is in the grades that we find the great numbers who cannot possibly complete the high-school course, perhaps not even the graded-school course. What shall we do with them? Shall they pursue the same course of study prescribed for the rest? In part I answer, no. Certainly I would have them acquire the rudiments of an English education, if it is possible for them to do so. I would also have them receive that moral instruction so necessary to the formation of character. Yet I am of the opinion that some form of *industrial training* should be given, at least to this class of pupils, while they are in the primary and intermediate grades.

While this is my belief, yet I have not given the subject sufficient thought to formulate a plan which I am sure will stand the test. I am aware of the fact that experiments along this line are being made in some American cities, yet I have no data at hand which will enable me to speak of the results. I have long thought of the advisability of introducing industrial training in the grades, in my own city, and I am only waiting for the opportunity to make the experiment. The plan I have in mind is not to attempt to establish industrial training in each school district, but to have one school, centrally located, in which industrial training is given. The course of study in this school would be more elastic than in the others and the classification less rigid. This would lessen the expense for teachers and equipment, and at the same time enable us to gather into this school those pupils of the primary and intermediate grades who are much older than their fellows, as well as those who fail in their classes. We could, therefore, give to these special attention under more favorable conditions, thus fitting them the better to meet the duties and responsibilities of life.

Finally, the course of study for those who cannot complete the high school, as well as for those who can complete it, must be determined chiefly by the society in which we live and by the occupations in which the pupils are expected to engage. In the past, education was the heritage of the few. The aristocracy of learning might prescribe a fixed curriculum consisting of classical knowledge of antiquity. The pursuit of this course of study they might solemnly declare to be the only road to learning. They might even go so far as to outlaw all other courses, and to arrogate to themselves a monopoly of learning. But if we are to have a democracy of learning in America, we must have a course of study that will meet the needs of the people. This course must be arranged so as to develop head, hand, and heart, thus fitting the children to engage in the busy, bustling, complex American civilization of the twentieth century. This course is not a legacy from the past, for the past has never had a civilization similar to our own. It cannot be imported from a foreign country, because nowhere else are the conditions and people like our own. But, like the principles of our government and the character of our people and their institutions, the course of study must be a resultant of the past, the foreign and the native not simply welded together, but fused into a new substance which is truly American.

NATIONAL COUNCIL OF EDUCATION

CONSTITUTION

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, thru printed reports, of the substance of the discussions, and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Educational Association, setting forth the questions considered by the Council during the previous year, and placing before the association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demand the attention of the profession or of the public.

ARTICLE I — MEMBERSHIP

1. The National Council of Education shall consist of sixty members, selected from the membership of the National Educational Association. Any member of the association identified with educational work is eligible to membership in the Council, and after the first election such membership shall continue for six years, except as hereinafter provided.

2. In the year 1885 the Board of Directors shall elect eight members — four members for six years, two for four years, and two for two years; and the Council shall elect eight members — five members for six years, two for four years, and one for two years; and annually thereafter the Board of Directors shall elect five members and the Council five members, each member, with the exception hereinafter provided for (section 5), to serve six years, or until his successor is elected.

3. The annual election of members of the Council shall be held in connection with the annual meetings of the association. If the Board of Directors shall fail, for any reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

4. The term of service of the several members of the Council chosen at the first election shall be arranged by the Executive Committee of the Council.

5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members, with the privilege of attending its regular sessions, and participating in its discussions. No state shall be represented in the Council by more than eight members.

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Educational Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held at the same place as the meeting of the National Educational Association, and at least two days previous to this meeting. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at those meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Educational Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointments of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—PREPARATION OF INDIVIDUAL PAPERS

1. The president of the Council shall send out, at least six months before each session of the Council, a circular inviting the submission of volunteer papers by members, requesting them to suggest names of other persons, not members of the Council, whom they believe willing and able to present valuable contributions to educational literature.

2. The Executive Committee shall determine what papers so offered shall be presented at the meeting of the Council.

The reports and papers to be presented to the Council shall be printed and placed in the hands of the members at least four weeks before the session. The papers so printed shall be discussed, but not read in full, at the meeting.

3. Whenever the printing of a paper is not feasible, an abstract or brief of such paper, if possible in the form of theses, shall be sent to the members of the Council at least a month before the meeting.

ARTICLE VII—STANDING COMMITTEES

1. There shall be three standing committees: an Executive Committee, a Committee on Membership, and a Committee on Educational Progress.

2. The Executive Committee shall be composed of the president of the Council and of three other members, whose terms of office shall be so arranged that one new member may be chosen each year, beginning with the year 1899.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to conduct such investigations. It shall be the duty of the Executive Committee to carry out the provisions contained in this constitution referring to volunteer and invited papers. It shall be the duty of the Executive Committee to provide a place on the program for the report on any investigation which may be ordered by the National Educational Asso-tion or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may be filled every year, beginning with 1899.

5. There shall be appointed annually a committee of one to submit, at the next meeting, a report on "Educational Progress during the Past Year," in which a survey of the important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Educational Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by two-thirds vote of the members present, and any provision may be waived at any regular meeting by unanimous consent.

By-laws not in violation of this constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, MEMBERS, STANDING COMMITTEES

OFFICERS FOR 1898–99

A. R. TAYLOR	Emporia, Kan	*President*
JAMES H. VAN SICKLE	Denver, Colo	*Vice-President*
BETTIE A. DUTTON	Cleveland, O	*Secretary*

EXECUTIVE COMMITTEE

The President

John Dewey Chicago, Ill. Nicholas Murray Butler, New York, N. Y.

L. H. Jones, Cleveland, O.

OFFICERS FOR 1899–1900

F. LOUIS SOLDAN	St. Louis, Mo	*President*
ELMER E. BROWN	Berkeley, Cal	*Vice-President*
BETTIE A. DUTTON	Cleveland, O	*Secretary*

EXECUTIVE COMMITTEE

The President

Miss Lucia Stickney, Cincinnati, O	Term expires in 1900
Elmer E. Brown, Berkeley, Cal	Term expires in 1901
Nicholas Murray Butler, New York, N. Y	Term expires in 1902

COMMITTEE ON MEMBERSHIP

C. H. Keyes, Hartford, Conn	Term expires in 1901
E. C. Hewett, Normal, Ill	Term expires in 1901
J. M. Greenwood, Kansas City, Mo	Term expires in 1903
J. H. Van Sickle, Denver, Colo	Term expires in 1903
W. T. Harris, Washington, D. C	Term expires in 1905
E. E. White, Columbus, O	Term expires in 1905

MEMBERS

NOTE: The letter "A" following a name denotes that the member is of the class elected by the asso-ion; the letter "C," by the Council.

	Term expires
James A. Foshay, Los Angeles, Cal	A 1900
* J. H. Phillips, Birmingham, Ala	A 1900
* E. E. White, Columbus, O	A 1900
* James H. Baker, Boulder, Colo	A 1900
Oscar H. Cooper, Galveston, Tex	A 1900
* Aaron Gove, Denver, Colo	C 1900
William E. Sheldon, Boston, Mass	C 1900
* Irwin Shepard, Winona, Minn	C 1900
* Lucia Stickney, Cincinnati, O	C 1900
H. H. Seerley, Cedar Falls, Ia	C 1900
James M. Green, Trenton, N. J	A 1901
* Augustus S. Downing, New York, N. Y	A 1901
* A. R. Taylor, Emporia, Kan	A 1901
Ellen C. Sabin, Milwaukee, Wis	A 1901
* R. B. Fulton, University, Miss	A 1901
* George P. Brown, Bloomington, Ill	C 1901
* Bettie A. Dutton, Cleveland, O	C 1901
* Charles H. Keyes, Hartford, Conn	C 1901
Lightner Witmer, Philadelphia, Pa	C 1901
* William F. King, Mt. Vernon, Ia	C 1901
Arnold Tompkins, Normal, Ill	A 1902
* Albert G. Lane, Chicago, Ill	A 1902
Edwin A. Alderman, Chapel Hill, N. C	A 1902
Charles M. Jordan, Minneapolis, Minn	A 1902
J. F. Millspaugh, Winona, Minn	A 1902
W. M. Davidson, Topeka, Kan	C 1902
* E. W. Coy, Cincinnati, O	C 1902
* O. T. Corson, Columbus, O	C 1902
Edward R. Shaw, New York, N. Y	C 1902
John W. Cook, DeKalb, Ill	C 1902
* W. T. Harris, Washington, D. C	A 1903
C. B. Gilbert, Newark, N. J	A 1903
William R. Harper, Chicago, Ill	A 1903
George T. Fairchild, Berea, Ky	A 1903
Charles R. Skinner, Albany, N. Y	A 1903
Charles De Garmo, Ithaca, N. Y	C 1903
L. H. Jones, Cleveland, O	C 1903
* Elmer E. Brown, Berkeley, Cal	C 1903
W. H. Black, Marshall, Mo	C 1903
* Nicholas Murray Butler, New York, N. Y	C 1903
Richard G. Boone, Cincinnati, O	A 1904
* F. Louis Soldan, St. Louis, Mo	A 1904
* L. D. Harvey, Madison, Wis	A 1904
* Frank Rigler, Portland, Ore	A 1904
James H. Canfield, New York, N. Y	A 1904
Andrew S. Draper, Champaign, Ill	C 1904
William H. Maxwell, New York, N. Y	C 1904
* James H. Van Sickle, Denver, Colo	C 1904
B. A. Hinsdale, Ann Arbor, Mich	C 1904
* N. C. Dougherty, Peoria, Ill	C 1904
* W. H. Bartholomew, Louisville, Ky	A 1905
* Frank A. Fitzpatrick, Boston, Mass	A 1905
* I. C. McNeill, West Superior, Wis	A 1905
* E. Oram Lyte, Millersville, Pa	A 1905
* J. M. Greenwood, Kansas City, Mo	A 1905
Paul H. Hanus, Cambridge, Mass	C 1905
* Joseph Swain, Bloomington, Ind	C 1905
* Nathan C. Schaeffer, Harrisburg, Pa	C 1905
David L. Kiehle, Minneapolis, Minn	C 1905
* Edward T. Pierce, Los Angeles, Cal	C 1905

* Present at the meeting of the Council in Los Angeles, 1899.

Total number present at the Los Angeles sessions, 30.

Total number honorary members present at the Los Angeles sessions, 3.

HONORARY MEMBERS

Henry Barnard, Hartford, Conn.
Earl Barnes, Stanford University, Cal.
William N. Barringer, Newark, N. J.
Newton Bateman, Galesburg, Ill.
D. Bemiss, Spokane, Wash.
Thomas W. Bicknell, Providence, R. I.
Albert C. Boyden, Bridgewater, Mass.
Anna C. Brackett, New York, N. Y.
John E. Bradley, Jacksonville, Ill.
Edward Brooks, Philadelphia, Pa.
William L. Bryan, Bloomington, Ind.
John T. Buchanan, New York, N. Y.
Matthew H. Buckham, Burlington, Vt.
David N. Camp, New Britain, Conn.
Aaron L. Chapin, Beloit, Wis.
Clara Conway, Memphis, Tenn.
Matilda S. Cooper, Nyack, N. Y.
William J. Corthell, Gorham, Me.
J. L. M. Curry, Richmond, Va.
John Dewey, Chicago, Ill.
V. C. Dibble, Charleston, S. C.
John W. Dickinson, Boston, Mass.
Larkin Dunton, Boston, Mass.
John Eaton, Washington, D. C.
Charles W. Eliot, Cambridge, Mass.
William W. Folwell, Minneapolis, Minn.
W. R. Garrett, Nashville, Tenn.
Daniel C. Gilman, Baltimore, Md.
James C. Greenough, Westfield, Mass.
John M. Gregory, Washington, D. C.
W. N. Hailmann, Dayton, O.
G. Stanley Hall, Worcester, Mass.
Walter L. Hervey, New York, N. Y.
Edwin C. Hewett, Normal, Ill.
J. George Hodgins, Toronto, Canada.
Ira G. Hoitt, Sacramento, Cal.
* James H. Hoose, Pasadena, Cal.
George W. Howison, San Francisco, Cal.
James L. Hughes, Toronto, Canada.
Thomas Hunter, New York, N. Y.
Ellen Hyde, Framingham, Mass.
John S. Irwin, Lafayette, Ind.
E. J. James, Chicago, Ill.
Henry N. James, Tacoma, Wash.
H. S. Jones, Lincoln, Neb.
E. S. Joynes, Knoxville, Tenn.
Thomas Kirkland, Toronto, Canada.
Henry M. Leipziger, New York, N. Y.
James MacAlister, Philadelphia, Pa.
Albert P. Marble, New York, N. Y.
Francis A. March, Easton, Pa.
Lillie J. Martin, San Francisco, Cal.
Charles A. McMurry, Normal, Ill.
Thomas J. Morgan, Washington, D. C.
Lemuel Moss, Minneapolis, Minn.
William A. Mowry, Hyde Park, Mass.
Mary E. Nicholson, Indianapolis, Ind.
John M. Ordway, New Orleans, La.
Francis W. Parker, Chicago, Ill.
Warren D. Parker, River Falls, Wis.
S. S. Parr, St. Cloud, Minn.
W. H. Payne, Nashville, Tenn.
Selim H. Peabody, Chicago, Ill.
John B. Peaslee, Cincinnati, O.
William F. Phelps, St. Paul, Minn.
Josiah L. Pickard, Iowa City, Ia.
J. R. Preston, Jackson, Miss.
John T. Prince, Boston, Mass.
Zalmon Richards, Washington, D. C.
C. C. Rounds, New York, N. Y.
William H. Ruffner, Lexington, Va.
Henry Sabin, Des Moines, Ia.
J. G. Schurman, Ithaca, N. Y.
H. E. Shepard, Charleston, S. C.
Edgar A. Singer, Philadelphia, Pa.
James A. Smart, Lafayette, Ind.
Euler B. Smith, Athens, Ga.
Homer B. Sprague.....Cal.
J. W. Stearns, Madison, Wis.
Thomas B. Stockwell, Providence, R. I.
Grace Bibb Sudborough, Omaha, Neb.
* John Swett, Martinez, Cal.
H. S. Tarbell, Providence, R. I.
W. R. Thigpen, Savannah, Ga.
H. S. Thompson, Columbia, S. C.
* L. S. Thompson, New Wilmington, Pa.
Julia S. Tutwiler, Livingstone, Ala.
Delia L. Williams, Delaware, O.
S. G. Williams, Ithaca, N. Y.
J. Ormond Wilson, Washington, D. C.
H. K. Wolfe, South Omaha, Neb.
C. M. Woodward, St. Louis, Mo.

* Present at the meeting of the Council at Los Angeles, 1899.

DECEASED MEMBERS

Robert Allyn.....1894
Israel W. Andrews.....1888
Joseph Baldwin.....1899
Norman A. Calkins.....1895
N. R. H. Dawson.....1895
Samuel S. Greene.....1883
Daniel B. Hager.....1896
John Hancock.....1891
William D. Henkle.....1882
Elnathan E. Higbee.....1889
George Howland.....1892
Merrick Lyon.....1888
James McCosh.....1894
M. A. Newell.....1893
Birdseye G. Northrop.....1898
Edward Olney.....1886
Gustavus J. Orr.....1888
John D. Philbrick.....1885
Andrew J. Rickoff.....1899
R. W. Stevenson.....1893
Eli T. Tappan.....1888
Charles O. Thompson.....1885
James P. Wickersham.....1891

SECRETARY'S MINUTES

FIRST DAY

FIRST SESSION.— SATURDAY, 2 : 30 P. M., JULY 8, 1899

The Council was called to order by the president, Dr. A. R. Taylor, in the parlor of the First Congregational Church, and opened with prayer by Dr. Elmer E. Brown, of California.

President Taylor introduced Dr. J. H. Hoose, of California, who gave cordial welcome to the Council on behalf of the city of Los Angeles and southern California, and, as an honorary member of the Council, made clear its character and aims.

Frank A. Fitzpatrick, of Massachusetts, responded on behalf of the Council.

President Taylor explained the work which had been done in arranging for the sessions of the Council, the changes in the work of special committees, and the provisions in the revised constitution affecting this work; and stated that investigating committees at work under the direction of the Council desired further time.

President Taylor announced that, as papers prepared for the Council had not reached the members as provided for by the new constitution, the rule would be suspended, and the paper of the afternoon would be read in full.

The paper was presented by Miss Lucia Stickney, of the Hughes High School, Cincinnati, and was entitled "The Homes of Our Down-Town Children." This paper elicited a spirited discussion, participated in by Frank A. Fitzpatrick, of Boston; J. M. Greenwood, of Kansas City; James H. Van Sickle, of Denver; W. T. Harris, of Washington; F. Louis Soldan, of St. Louis; Miss Dutton, of Cleveland, and Elmer E. Brown and J. H. Hoose, of California. Miss Stickney summed up and closed the discussion.

After announcement of evening program by President Taylor, the Council adjourned.

SECOND SESSION.— SATURDAY EVENING, JULY 8

The Council convened at 8 o'clock and listened to a paper by W. T. Harris, entitled "The Future of the Normal School." Discussion followed the reading of the paper, in which remarks were made and questions asked by J. M. Greenwood, Miss Dutton, F. Louis Soldan, and Irwin Shepard. Mr. Harris closed the discussion, and President Taylor appointed the following committees:

EXECUTIVE COMMITTEE

For one year — Miss Lucia Stickney, of Ohio.
For two years — Elmer E. Brown, of California.
For three years — Nicholas Murray Butler, of New York.

COMMITTEE ON MEMBERSHIPS

For two years — C. H. Keyes, of Massachusetts; E. C. Hewett, of Illinois.
For four years — J. M. Greenwood, of Missouri; J. H. Van Sickle, of Colorado.
For six years — W. T. Harris, Washington, D. C.; E. E. White, of Ohio.

COMMITTEE ON NOMINATIONS

E. W. Coy, Cincinnati. F. Louis Soldan, St. Louis.
Frank A. Fitzpatrick, Boston.

Council adjourned at 10 : 15 P. M.

SECOND DAY

THIRD SESSION.—MONDAY, 9:30 A. M., JULY 10

After the reading and approval of the minutes of the preceding sessions, the report of the special Committee of the Department of Superintendence on School Hygiene was presented by W. T. Harris, Commissioner of Education, Washington, D. C. George P. Brown, of Illinois, suggested the appointment of a committee to bring this subject definitely before the Council, stating that boards of education were looking for definite knowledge on this subject. President Taylor mentioned the fact that the committee was already at work in the Department of Superintendence; but for the furtherance of the work the following resolution by E. E. White, of Ohio, was carried:

Resolved, That this Council hereby approves of the thoro investigation of the subject of school hygiene, as proposed by the report of the Department of Superintendence submitted by its committee, and it is hereby recommended to the Board of Directors of the National Educational Association that an appropriation not exceeding $1,200 be made for this purpose for the expenses of a special report or for prize essays, as may be hereafter determined.

Dr. Harris offered the following resolution, which was also carried:

Resolved, That in case of the appropriation by the Board of Directors of the sum of $1,200 for the purposes named in this report two prizes be offered for essays on each of the topics named, to-wit: a first prize of $200 and a second prize of $100.

The following resolution by George P. Brown, of Illinois, was moved and carried:

Resolved, That a committee of five, of which the president of the Council shall be one, be appointed to present this matter to the Board of Directors, and to arrange for the securing of the prize essays referred to in the above resolutions, provided the Board of Directors grants the appropriation.

The committee was appointed as follows: President A. R. Taylor, W. T. Harris, George P. Brown, William F. King, Aaron Gove.

The second paper of the morning was presented by Charles H. Keyes, of Massachusetts, entitled "Differentiation of the American Secondary School." Discussion of this subject was opened by Aaron Gove, of Denver, and continued by Messrs. Harris, Greenwood, Coy, Van Sickle, Baker, White, and Morrison.

The Council adjourned at 12:30 P. M.

FOURTH SESSION.—MONDAY, 2:30 P. M., JULY 10

The report of the special Committee on State Normal Schools was presented by the chairman, Z. X. Snyder, Greeley, Colo.

On motion of E. Oram Lyte, Hon. Henry S. Townsend, inspector general of schools of Hawaii, was invited to sit with the Council and participate in its discussions.

Discussion of Mr. Snyder's report was opened by J. M. Greenwood, who was followed by Messrs. Gove, Hoose, Townsend, White, Lyte, and Soldan.

The next paper presented to the Council was by State Superintendent L. D. Harvey, of Wisconsin, entitled "Do We Need a University Trust?"

The discussion of this paper was opened by James H. Baker, of Colorado, and continued by Messrs. Gove, Greenwood, White, Hoose, and President Taylor.

Mr. Greenwood moved that Mr. Harvey's paper be referred to the Committee on National University. Carried.

Adjourned.

FIFTH SESSION.—MONDAY, 8 P. M., JULY 10

President Taylor explained the absence of Edwin C. Hewett, whose paper on "Psychology for the Teacher" had been printed and distributed to members.

The paper was discussed by Aaron Gove, J. H. Hoose, and J. M. Greenwood.

Nicholas Murray Butler presented the report of the Committee on Educational Progress.

A vote of thanks was extended to Mr. Butler for his address.

The Council adjourned at 10:15 P. M.

THIRD DAY

SIXTH SESSION.—TUESDAY, 9:30 A. M., JULY 11

The minutes of Monday's session were read and approved.

The report of the special Committee on the Relations of Public Libraries to Public Schools was presented, and was discussed by J. H. Van Sickle, L. D. Harvey, N. C. Schaeffer, George P. Brown, J. M. Greenwood, J. H. Hoose, F. A. Fitzpatrick, and F. Louis Soldan.

The Committee on Necrology reported that the members who had passed away within the year were Dr. J. M. Baldwin and Dr. Andrew J. Rickoff. Tributes to these members were presented by J. M. Greenwood and Aaron Gove.

Mr. Butler moved that these reports be included in the published report of the Council, adding: "It is my lot to belong to a younger generation than that which these two great teachers adorned. The pettiest vice of youth is ingratitude to age. To have known and to have labored with that band of great men — some of them are happily still left to us — who have interpenetrated the public education of this country, and who founded this association and brought it to greatness, is a high honor and a privilege. Dr. Rickoff and Dr. Baldwin were giants of their time. Theirs were long, arduous lives, devoted to humanity and to childhood. They had that rare charm of character, sweetness and kindness of disposition, and that consideration for the mistakes and the ignorance of others, which are the indubitable marks of a great soul. It is fitting that we should pause for a moment to pay high tribute to their memories."

The Council, by suggestion of President Taylor, stood for some moments, in silent respect to the memory of these two who had passed away within the year.

EXECUTIVE SESSION.—TUESDAY, 11:30 A. M., JULY 11

The Committee on Nominations reported as follows:

For *President*—F. Louis Soldan, of Missouri.
For *Vice-President*—Elmer E. Brown, of California.
For *Secretary*—Miss Bettie E. Dutton, of Ohio.

The report of the committee was received and adopted, and the nominees declared unanimously elected.

The Committee on Memberships then reported as follows:

Members of the National Council:

Your Committee on Memberships respectfully submits the following report:
We recommend that the following-named be elected members of the Council:
D. L. Kiehle, of Minnesota, to succeed himself; term to expire in 1905.
N. C. Schaeffer, of Pennsylvania, to succeed himself; term to expire in 1905.
Paul H. Hanus, of Massachusetts, to succeed himself; term to expire in 1905.
Joseph Swain, of Indiana, to succeed Miss Mary E. Nicholson; term to expire in 1905.
E. T. Pierce, of California, to succeed John Dewey; term to expire in 1905.
O. T. Corson, of Ohio, to succeed H. S. Tarbell; term to expire in 1902.
W. M. Davidson, of Kansas, to succeed C. M. Jordan; term to expire in 1902.
W. H. Black, of Missouri, to succeed S. G. Williams; term to expire in 1903.

(Signed) C. H. KEYES,
For the Committee.

The report of the committee was received and adopted.

Mr. Greenwood moved that the president be authorized to make a report for this

session of the Council to the Board of Directors of the National Educational Association. Carried.

Mr. White gave notice that at the next annual meeting he would offer a resolution looking toward relieving the Council of assuming to conduct so largely the investigations of the departments.

Adjourned to meet at the call of the president.

EXECUTIVE SESSION.—CHAMBER OF COMMERCE, TUESDAY, JULY 11

The following communication, which had been referred to the Council by the Board of Directors, was received:

To the Honorable, the Directors of the National Educational Association:

The undersigned, chairman of the Committee of Ten on Elementary Art Education, created by the Art Department of the National Educational Association at Washington, D. C., July 8, 1898, respectfully requests, on behalf of the Art Department, an appropriation of $600 to assist in completing their report on "A Basis for a Course of Study in Elementary Art Education."

LANGDON S. THOMPSON,
Chairman of Committee.

Referred to the Council for recommendation.

IRWIN SHEPARD,
Secretary.

On motion of Mr. Phillips, a committee was appointed to confer with the committee of the Art Department, and to report to the Council in one year. President Taylor named as this committee Messrs. Downing, Phillips, and White.

Adjourned.

BETTIE A. DUTTON,
Secretary.

PAPERS AND DISCUSSIONS

THE HOMES OF OUR DOWN-TOWN CHILDREN

BY MISS LUCIA STICKNEY, HUGHES HIGH SCHOOL, CINCINNATI, O.

THE SUBJECT OF THE REPORT

I desire to present to the Council, from the point of view of a settlement resident, a picture of the home life of the greater part of the down-town people whose children are in the public schools. It is not a picture of the submerged tenth with whom the police and the slum sisters of the Salvation Army have to do, but, perhaps, of a third of the other nine-tenths, better known to the truant officer, the settlement worker, and the kindergarten teacher.

THE SOURCES OF INFORMATION

The settlement, now in its fifth year, is in touch with about seven hundred of these families; our workers visit their homes, and the mothers and children come to our house, to the kindergarten, to classes, to clubs, to the library, and to the Penny Provident Savings Bank. The story of these people would be, in substance, the story of the class; yet, with

this report in mind, a list of a hundred names and addresses of the children in two rooms of one of our average district schools was obtained from the teachers. The homes were visited and the mothers invited to meet the teachers in a social way. The round of calls thus made revealed nothing new in regard to the general condition, tho it added to the story many interesting details. In addition to this tour of observation, a visit was made to a teacher in one of our best-known schools, whose habit it is never to send for the parent of a delinquent pupil, but to go to the house when occasion requires. She has in this way become familiar with many of the dwellings of the poor children. Her story did not change the character of the picture already drawn, but gave to it a decided dash of color. Then one of the secretaries of the Associated Charities, who is a live cyclopædia of the dependent families of the city, was called upon; and if the picture can be said to have a flavor, it got it from him. Finally the truant officer devoted an hour to the finish of the picture, brought it into strong perspective, with marked effects of light and shade.

CASES CITED

From these five sources I have taken ten brief studies of such families as would give a fair impression of the general condition, and present them quite at random, as follows:

1. An intelligent family, very cordial. The father has been sick for seven years, and is now in the last stages of consumption. They have but recently come to poverty. The mother gets sewing from the shops, makes wrappers and shirt-waists — the former at one dollar, the latter at seventy-five cents a dozen. By hard work she can earn fifty cents a day. The two children, a boy and a girl, are in school. They both sell papers in the afternoon, making from six to twenty cents, according to the weather. The girl sells more than her brother. In the evening they sit down to their lessons. They are among the best pupils in the school. The mother showed us their exercises with evident pride.

2. The father and mother at home, both silly drunk. The children at school. The house apparently well-kept. Lace pillow-shams.

3. Family of fifteen in three rooms. Eleven boys. Nine sleep in two beds opened out and placed side by side, completely filling the room. Six in school. The older boys work in the slaughter-house. No carpet; no table-cloth; no curtains. Very pleasant people.

4. A family of seven. Of the five children four are deaf-mutes. The teacher who called to look after the speaking members deplored the existence of such a family of defectives. The mother answered with comforting assurance: "O, the state will take care of them."

5. The teacher in search of Bessie's mother to inquire why Bessie, a girl of thirteen, did not get her lessons in the evening, was directed to the fourth floor, and found herself in an unplastered attic, with a clothes-line

stretched across. A sick baby lying by the wet clothes. This is a boarding house. The boarders work in the slaughter-house. The table is set with sausage, beer, and black bread. Mattresses are piled up in the hall and spread out to sleep on at night. The mother takes in washing, and Bessie cannot study in the evening because she must help with the ironing. Bessie is studying technical grammar, eight applications of percentage, and the geography of Asia. She hears plenty of profanity at home and gets no hint anywhere of a better way of living.

6. A family of nine living over a saloon in three rooms. The mother, endowed with native energy, is a conscientious drudge. The children are neatly dressed. They are bathed three times a week. The mother is devoted to them, but slams them around and is unconsciously disagreeable.

7. A family thriftless, untidy, picturesque, and attractive. The closets are full of old clothes which the mother has begged and put away without making over.

8. A family of ten with a tragic history. The mother died of injuries inflicted by the father, who is cruel to the children and treats them shamefully. The oldest, a girl of sixteen, cares for the family. She is going to the dogs.

9. A family of seven in two rooms. Well-to-do, own the building, and let out the rooms at a high rent. The house is unsanitary, foul smelling. The family, driving, energetic, disagreeable with each other. Have none of the graces.

10. A family of eleven in two rooms, have an income of seven dollars a week. They are hopelessly dirty. The mother good-natured and easy-going. The children have a pretty good time.

GENERALIZATION

These studies are given rather as illustrations than as a basis for generalization. The general statement of their condition is not new, but the extent of the condition which, in the down-town part of our large cities, is growing wider, makes its claim for thoro consideration imperative. It appears from the uniform testimony of the settlement worker, teacher, and officer that more than half of our down-town people live in tenements, usually in two rooms. The size of the family is not limited by the accommodations. They sleep anyhow. Many of them have no regular meal time. Food is always about, and the children eat at any time. They call this "piecing it." The less thrifty often live well — that is, have chickens on Sunday and Monday, and have very little for the rest of the week. They do not know how to make soup, and have very little practical knowledge of buying or cooking wholesome food. The one absorbing thought is how to make a living, and the aim in rearing children is to get them to work so that they can pay them back for what they have

done for them. The father is often without work, and by careful investigation this is shown to be by far the most frequent cause of distress. To be sick and out of work is their despair. So stern a fact is the need of money that one, in telling the story of the death of one of her children, said that if it had been the other one, whose life had been insured, that had died, it would not have been so bad.

With all their poverty the mother is often orderly, and the rooms so clean that you could eat off the floor, but in such a case she is often cross and nags the children. It is too often the easy-going, wretched housekeeper who is the kindly and good-natured mother. The poor, like most people, are illogical, but are imitative, and follow the example of their betters in being well-dressed, even beyond their means. The visitor finds them cordial and polite, ready to tell their story, and to accept an invitation to the house, tho their doing so does not always mean that they will come. They usually disclaim any intimacy with or knowledge of the other families in the house, yet they are really neighborly in spirit and good-hearted. They lack in tenderness and sympathetic treatment of their children. A mother who will devote herself to a sick baby, sitting up days and nights for weeks, has only chidings for the little three-year-old who hurts himself and cries out with pain.

The children are kept in school by the law until they are fourteen, or large enough to be, and then graduated into the factories. A few aim higher and land in the stores. They are without any domestic or economic education, and very seldom become house servants. This would be discouraging for those who seek for their betterment, if they did not show an eagerness to acquire domestic ideas. Nothing has elicited a greater interest, in the woman's club at the settlement, than a course of lessons in cooking, and the prize for bread-making awakened much enthusiasm.

To the poor the gospel is preached. With the Bethel Sunday school of 3,000 members, with the manifold mission work of both Protestants and Catholics, there is no lack of church privilege, and it would seem that in general these people are better church-goers than their fellow-citizens of the hill-tops. But these churches hardly undertake to give their people any weekday social life, and in any proper social opportunities they are sadly lacking. The factory girls go to balls, often twice a week, but the Shamrock Club of girls from Dublin street, after four years of coming to the settlement, declare that they like their club better than going to the ball. It is with this social life that the settlement has largely to do. Morality and social habits have been improved in the last ten years. The alleys have been furnished with electric lights, which have been a great help to the police. The untiring efforts of the deaconess, the missionary, the friendly visitor, the slum sister, and the sister of charity, as well as the settlement worker and free kindergarten teacher, are slowly but surely

making their impression. Charity, courtesy, and good-fellowship have become contagious. But there is no true home; the domestic life is drudgery and dreariness, and the industrial conditions are black and discouraging.

The public school stands in close relation to these conditions. Its discipline shows itself in these very districts to be by far the greatest of the ameliorating forces. But its work, like the rest, has failed to make a visible impress upon the home life. The old name of the humanities needs to be applied to a new branch, that of home-making. The work to be done for these people to lift them out of their despair is to make the life at home a part of public education. It is not enough to say that the work is already inaugurated, that Boston has its sewing and cooking classes, and Chicago its manual-training centers, so long as these conditions of tenement life outstrip in their growth all attempts at reform. We read that the London board of education adapts the work in school to the needs of its various classes, without aiming at a uniform system; that Paris, thru its mothers' unions, maintains in every district a close relation between the home and the school. But in our country the tradition of a set curriculum and uniform requirements rests too heavily upon the school to hope for a radical change, until it has the stamp of authority of the highest educational forces. The first step toward such a change should be a thoro scientific investigation of the matter. This could be made with comparatively little trouble, since the philanthropic workers in the field could furnish abundant details of domestic conditions. And the uniform testimony of these workers will be that the public school is the only channel thru which the better way of living can penetrate into the homes of those who cry, without knowing what they cry: "Who will show us the better way?"

DISCUSSION

[REPORTED BY J. M. GREENWOOD]

MR. FITZPATRICK did not agree with the essayist in regard to the lowest stratum of society. "In London 150 years ago," he said, "the level of all life, even that of the best people, was not much higher than that of the people whose condition has been described by Miss Stickney. In looking back I am reminded of a school in St. Louis which I had in charge, situated in a district comparable to that described by Miss Stickney. In watching the history of the children whom I knew in this school in St. Louis twenty-five years ago, I have been specially gratified to see the number of boys and girls who have raised themselves to a higher plane than that of their parents. These families, below the level, work themselves out and up. The industrial condition is getting better. We need to get over the opposite belief, as taught by Carl Marx and Henry George."

Mr. Fitzpatrick broached the great question whether charity work, as ordinarily conducted, results in good or evil. He said that the officials of the oldest Massachusetts charity organization, which has been active for 125 years, declare that it is a matter of grave doubt whether the sum total of what has been accomplished is good or bad. The root of the evil is not reached.

Work on the line of domestic economy is most helpful in an effort to better conditions thru the agency of the schools. All observers agree that the poor cannot use their money properly. A very small sum suffices to feed a family, if it is properly expended. In most poor families the waste is tremendous. More is thrown out in the garbage than is used. The poor should be taught how to expend their money. One branch of work that is bettering conditions is the tearing down of old tenements and the construction of new ones on scientific lines. The difficulty is experienced that the people do not want to move into the new ones.

Mr. Greenwood expressed the opinion that some parents were unfit to rear children, and in cases of extreme neglect and drunkenness the state should intervene and place such children under wholesome influences. The state had the right to protect itself from crime.

He discussed the "gangs" in which the boys of the various neighborhoods organize themselves for mutual protection. He pointed out as a helpful custom the fact that the boys and girls in the ward schools of Kansas City know which ones of their classmates are in needy circumstances and form committees to supply them with shoes, clothes, and even food — not merely at Christmas and Thanksgiving, but thruout the year. The only way to find deliverance for the poor is to put them into such a condition that they can work out their own salvation.

Mr. Van Sickle thought that in the lowest stratum of society instances of boys and girls raising themselves to a higher plane than the one occupied by the parents are altogether too infrequent; that the process of evolution, depending as it does so much upon environment, might be hastened. Light is thrown upon the problem by the experience of thirty years of effort to elevate the negro race. Booker T. Washington has for his race presented the true solution in manual and industrial education along with that which is more strictly intellectual. We have come to the same view with regard to the Indian, whom, for over one hundred years, we have been trying to civilize. The people referred to in the paper need civilizing. We must accomplish it thru the children. Philanthropic effort has been successful in this field only in demonstrating by experiment the method which must be used; for example, the kindergarten, instruction in domestic economy, etc. Some institution (perhaps the public school — no other is now sufficiently powerful) must make general those kinds of training which from time to time are proved most effective.

Dr. Harris stated that society may be divided into two classes: those who can take care of themselves, and those who cannot do so. He would not take the child from its parents, but leave it in the family, whose training is to be reinforced by the school. On the side of the school, the child is brought to a knowledge of the written language, so that he may be a learner all his life. This is a great step forward in civilization.

Dr. Harris took vigorous exception to Mr. Greenwood's suggestion that the state should take children away from parents whose influence is bad. It is a terrible thing to wrench children away from their families. An orphan asylum is one of the saddest of sights. I would help a child *in* his family. Let him come to the school for instruction, but send him back again to his family. Soup houses in connection with public schools might not be a bad thing. There are people who want nurture instead of training. We should strengthen them by our help.

Why not have experiments in cooking before the children and then give them the

food that has been cooked? It would be a good thing to have meetings of the mothers at the schools and in their houses, and teach the mothers how to make their money go farther than it does now.

He concluded by saying that the value of present-day schools must not be underestimated, even where there is no industrial training. The illiterate man has a hard row to hoe. He who cannot think in print is enormously inferior to him who can. A man who has once learned to read cannot help learning after that, in this day of newspapers and of books that cost ten cents, which 400 years ago cost $1,000, and had to be read for the people by a clerk from a volume chained to a desk.

Mr. Soldan saw the school under such universal relations, and the demands becoming so great by the imposition of new tasks, that there was real danger of overloading and throwing on the schools work that belongs to other organizations better equipped. In life the social line of cleavage ran horizontal everywhere, notwithstanding an apparent vertical movement in some abnormal localities. The schools should not attempt to do all things.

Elmer E. Brown discussed the two kinds of education known in the Middle Ages — the liberalizing studies which were for the upper classes only, and the industrial education given in the trade guilds.

It is the glory of the American schools that they afford to the very poorest an opportunity to get that liberalizing education which was once solely for the rich. But we ought not to be bound by old conditions. We are recognizing the fact that all the interests of man are closely related. We are not willing that a school should minister to only one part of man's interests. The artificial stratum which separates the school from the home should be destroyed. The school of today has something to say for the side of a man's interest which has to do with his industrial life and his home-making. In liberalizing education we should liberalize the practical side. I have sometimes thought that, if in the schools in the working districts the whole afternoon were devoted to instructing the children in practical things, the child's real education, his rounding-out on every side, would be more genuine and more successful.

J. H. Hoose said that the sure and cruel laws of nature have been cited to work corrections to certain evils introduced into society by the habits of mankind. Grant this, but is it enough to depend upon these laws to raise humanity to the upper levels of well-being? Shall society rest from its labors, trusting to the ultimate power of nature to emancipate mankind fom the evils found therein? The fact is that man's direct efforts must supplement nature's laws.

The paper and the discussions have emphasized ideas which investigations have suggested heretofore. Let them be called foolish ideas. Compare the problem of the down-town children with those of temperance and economics. Students of the temperance question, seeking remedies which touch the source of the evils, have arrived at the idea of prohibition. Students of economic conditions have run upon the idea of over-population and its effects upon economic well-being. This idea is known as Malthusianism. The point is obvious at once. Let the state create what might be called a "Bureau of Affinities and Heredities," and charge it with the duty of supervising the problem of the down-town children. Study this matter scientifically, or else drop it entirely.

A new value of the individual man entered into state and society with the idea of suffrage. In early and mediæval times the few only touched the notion of state. Education and well-being were the prerogatives of the few, the ruling classes. The masses seemed to have no rights or inherent needs; they simply lived as best they could. But when the man became a voter, his importance to the body politic was magnified. Educational advantages were extended to him and to his children. Philanthropy took an

extended scope. Education and benevolence now are interested in the homes of the down-town children. The welfare of these children is a problem, not only of education, but more emphatically of economics — in the larger sense, it is a question of sociology.

MISS DUTTON asked whether it is not possible to reach this problem from the upper side by changing the general course of study to meet special conditions. The thought was to teach the pupils the art of living, taking care of the home, and performing its duties. The case of a young woman was cited bearing directly on this point.

GEORGE P. BROWN said that education must connect itself with all classes by bringing them into closer relation, so that many interests would be common. Home life and school life are mutually dependent. The theoretical and practical school should be combined in the education of the child.

MISS STICKNEY, in closing, declared that it is possible for the public school to do a work for the amelioration of society which no other agency, nor all other agencies put together, can do. The home life, she said, is the point where the work can be done. The free kindergarten was commended as particularly helpful. She inveighed against a set curriculum and said that the course of study should be fitted for the need of the individuals. Mothers' meetings, greater intimacy between teacher and pupils, and instruction in domestic economy, were mentioned as possibilities for betterment of social conditions.

THE FUTURE OF THE NORMAL SCHOOL

BY WILLIAM T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION

Many years ago I set myself to the work of studying the methods of schools for the training of teachers, having noticed the superiority of their graduates over those without professional education, both in furnishing skilled teachers and in inspiring them with a professional zeal that causes them to improve for many years after entering the work of teaching. I have tried to set down in this paper the grounds for commending the normal school, as it exists for its chosen work of preparing teachers for the elementary schools, and at the same time urging the need of training schools with different methods of preparation for the kindergarten below, and for the secondary school, the college, and the postgraduate school, above the elementary school.

In our time a new epoch is beginning in the study of educational methods. There is a widespread movement known as "child study," which devotes itself to learning the natural history of infancy, childhood, and youth. It will discover the laws of development. It will learn how to take the child out of a lower form of intellectual activity into a higher form; how to prevent that mischievous arrest of development which is produced at present by too much thoroness in mechanical methods. It will know the pathology of education as it has never been known before.

Besides "child study" there is progress in the invention of devices of

instruction. These relate to the discovery of ways and means whereby the child is made more self-active in the process of learning, and not so dependent on the teacher's powers of illustration.

In this direction an entire new field, that of Froebel's kindergarten, has been occupied and brought under inspection. The educative effect of the child's first playthings has been to some extent measured. The lullaby of the nurse, the first sight of the moon and stars, the meaning of imitation, the relation of what is symbolic to what is conventional; how the child becomes original and outgrows the merely imitative stage of mind; how to preserve his interest from step to step in a graded system of instruction — these are kindergarten problems that furnish much that is of consequence for the study of method in normal schools. But the most important advances in the study of educational methods, those which warrant us in speaking of a new era in the training of teachers as being on its advent, have resulted from the movement of colleges and universities to establish professorships in education. The university professor, taking up the work of preparation of teachers, has been obliged to plan for himself a different line of work from that of the state normal schools and the city training schools. He has to deal with students advanced beyond elementary and secondary studies into those of the higher education, and he must plan a suitable curriculum for a class of students not easily interested in the traditional normal-school course. This difference has gradually become apparent to both classes of teachers. It has become evident that this method of instruction, and the organization of the work of training teachers, should vary according to the grade of education. There is one method for higher education and another for elementary. Within each of these there should be a further discrimination of method, so that five stages of method should be noted.

First, that of the kindergarten, which is adapted to what I call the symbolic stage of the mind, needs a method more like that used by the mother of a family than that of the traditional primary school. In the symbolic stage of intellect the child lets one thing stand for another thing, and does not think fully in the logical terms of universal, particular, and singular. He does not understand things in their process of derivation. His intellect is an activity of noting resemblances and symbolizing one thing by another; and his will-power is chiefly a process of imitation — an attempt to body forth by his own effort some event that he sees in the world; for imitation is the symbolism of action, while pure symbolism is the imitative process of the intellect. Both are crude preliminary stages in the entire process of mastering the world by learning all the necessary steps to the true actuality.

Now, since play unites these two child activities, symbolism and imitation, it is evident that the method of first education with the child, say from two to six years, must have reference to the play activity, and the

first school which the child may enter should be a school having the general characteristics of the kindergarten.

The method of the primary school and the grammar school, the two divisions of the elementary school proper, is founded on the habit of mind that follows the symbolic. For after the symbolic stage of mind comes the conventional stage wherein the child struggles for the mastery of the signs adopted by civilization for the purposes of collecting and preserving the lessons of experience. These signs are, for example, the written and the printed alphabets, the notations of arithmetic, the technical terms used in geography, grammar, and history, and such other technical vocabularies as enter the elements of natural science and sociology. The child has also a practical technique to learn in the elements of drawing, penmanship, and the limited fields of experiment that must go with the mastery of the word-and-idea technique.

We can see at a glance how different the method of instruction in the elementary school must be from that of the kindegarten. In the latter, precision is not attempted in the technical sense, for that would involve an abuse of the intellect and of the will, at the tender age from three to six years. Its work of imitation is a loose sort of production which omits the greater part of the process for the reality of that which is imitated. For instance, the child mimics the farmer sowing the seed or mowing the grass, but does not use seed, or a scythe that will cut anything. In fact (if we notice carefully), he does not imitate closely even the motions of the hand or arm. In the symbolic or imitative stage one thing stands for another, and one act for another, when there is only a superficial resemblance. Hence the child arrives at only crude unities of thought and action in the kindergarten. He is trained to look for unities rather than to find them. But imitation and symbolism strengthen mightily his power of attention and his development of bodily skill, while they give him the ability to understand the feelings and motives of the human beings around him. But in the elementary school the child is not taught to seek resemblances so much as to analyze and define accurately. He must now individualize facts and events rather than gather them into loose aggregates by means of symbols.

The chief characteristics of the method of teaching in elementary schools must then be accuracy of definition. The word must be made to recall the child's experience. He must be made to verify for himself by experiment all that can be reproduced by him without costing too much time. For there are many things in the infinite concourse of particulars that do not pay to verify by experiment. The good normal school shows the elementary teacher how to select the typical facts in each department for illustration, and where to require much or little practical experiment in the way of verification. But everywhere the child's experience must be drawn upon for illustration.

In order to fit the teacher to perform this work, the normal schools of this country, since the first one was opened at Lexington under Cyrus Peirce, have followed substantially the same tradition and made the chief part of their course of study a review of elementary branches — reading, writing, arithmetic, geography, history, and grammar.

It has often been said, with the air of an apology, that this review would be unnecessary if it were possible to secure pupils of advanced grade, implying by this that, if the secondary course of an ordinary high school had been completed, this review work in the elementary branches would be undertaken instead.

But this is not borne out by experience. The teacher who is to teach these elementary branches after graduation finds no work of preparation in the normal school half so valuable as this review of those branches in the light of more advanced studies. No work that is done in the secondary school — that is to say, the high school or the academy — is an equivalent for the normal-school work done on the same studies. What is learned for the first time in the elementary or the secondary school is learned as a step to what lies beyond. Thus arithmetic is a step toward algebra, and geography a step toward the organic sciences, such as biology, geology, and ethnology. When the pupil has climbed to the studies beyond, he drops the elementary steps out of sight. Of course it follows that, in the high school or in the college, those lower branches are not reviewed in the light of the higher branches — arithmetic is not studied anew in the light of algebra and geometry; descriptive geography is not reviewed in the light of physical geography, botany, zoölogy, and geology; English grammar is not reviewed in the light of studies in Latin and Greek, or in philosophy and logic; nor the history of the United States seen in its relations to that of Great Britain and the continental nations of Europe.

But the teacher needs precisely this re-examination of all his elementary branches in their relations to the higher studies that furnish them their rules and laws.

It has happened that the American normal school has taken up just this work of review from the beginning, and has performed it well during the entire sixty years of its existence.

It has induced in the young men and women preparing for the work of teaching a habit of looking at the lower branches in the light of the higher branches from which they derive their principles. This we may call the method of construction; it takes up a branch of study and views it constructively — for to study arithmetic in the light of algebra and geometry is to study it constructively. Its rules are derived from algebraic formulæ and are to be demonstrated by algebraic processes. So the details of geography have their explanation in the formative processes that shape the land and water, all of which are treated in physical

geography, and in the sciences of which it is a compendium. The higher the standard of preparation in the pupils who enter the normal school, the more profitable is this work of reviewing the lower branches in the light of the higher, and thus studying them constructively.

A good teacher in any grade of work requires the reflective habit fully formed. The subject, when first learned, cannot be seen as derivative from still higher branches. Hence the average graduate of the high school who has not reviewed the elementary branches in the light of the high-school course of study cannot teach them so well as the normal graduate who has applied the secondary course of study to the elementary course in a constructive manner.

The first learning of a subject is, and must be, largely a work of the memory. For how can the pupil know the derivation of an object until he has first formed some acquaintance with its present state of existence? But the real knowing begins beyond the process of memorizing; it begins with reflection upon the data given, and with the discovery of interrelations and the process of derivation from higher sources.

The fact that the standard of admission by age into the normal school is higher by two years, three years, or even four years, makes a great difference in the work of studying branches constructively. Nothing is more important than age in the preparation for a reflective habit of mind.

Hence the normal school finds it possible to conduct all of its lessons with special attention to method. While the pupil of an elementary school learns a lesson in arithmetic, geography, or grammar only with the object in view of clearly understanding it, the normal-school pupil is always to think of the method of explaining this and making it clear to boys and girls.

He not only masters the branch of study as presented in the text-book or by the professor, but he studies critically the method of presentation of book and teacher, and thus acquires a critical point of view.

The class work and recitations of the normal school, therefore, take the student by surprise at first. He supposed himself to understand already the simple branches — geography, grammar, arithmetic — but he discovers now that there were a thousand phases of each lesson which he had not before noticed. He sees the importance of a full preparation on the part of the teacher, if he is to be able to take advantage of the opportunities which the class exercise will give him to correct wrong views and bad methods of preparing the lesson.

He therefore studies his second lesson with many side-questions in view. He improves from day to day, and in the course of a year he has formed a new ideal of the best method of study. He has passed from the method of following the lead of the text-book and committing it to memory to the better method of critical investigation. Formerly he

would have been satisfied with a pupil who repeated verbatim the words of the book, and would have done little to probe the understanding. Now he would go directly behind the words of the book into the pupil's understanding and teach him how to think — how to investigate for himself. For the teacher has acquired in the normal school the habit of comparing one statement with another and with the results of his actual experience. He penetrates the plan of construction of the book itself. This makes him a shining light for his pupils.

We must not suppose for a moment that any other fine qualities, any acquaintance with educational devices or what are called "fads" or fashions, will make up for a defect in this knowledge of the constructive method. The solid foundation of successful work would be lacking.

This view, if correct, will explain to us the improvement that has come to our elementary schools from the multiplication of public normal schools supported by the state or the municipality, or founded on their model by private enterprise.

The records show that in the past seventeen years the enrollment in normal schools supported by states or cities has increased from about 10,000 pupils to something over 43,000. The attendance on normal schools founded and supported by private enterprise has increased from about 2,000 to 24,000, the the increase has been very slow in the past three years. I have obtained the earlier terms of this ratio by revising the data furnished in the reports of 1880. Up to 1890 the statistics of normal schools did not carefully separate the pupils enrolled in the preparatory department from those in the regular course of study. I have, therefore, revised the earlier data, which show 25,736 students in public and private normal schools in 1880, and reduced that number by a little more than one-half. Thus revised, the figures stand 12,000 in 1880 and 67,380 in 1897. In 1880 there were 240 normal students in each million of inhabitants; in 1897 there were 936 in each million.

The normal school, it may be said, in view of the explanation I have just now given of its instruction, has the general effect of making its pupils observant of methods.

The ordinary person sees results, but does not take note of the methods by which they are produced. Hence the teacher who has never received instructions in a normal school may happen to be a good teacher, but it is quite unusual for him to understand how he secures his own results; and he is not often able to profit by seeing the work of other good teachers. For he cannot readily see what method they use, not having acquired the habit of looking at methods. On the other hand, the normal-school graduate can seldom visit a successful school without carrying away some new idea, or at least some new device of method. Hence normal-school graduates continue to grow in professional skill for ten, twenty, or even thirty years, while it is said truly that the teachers

not from normal schools usually reach their maximum skill in from three to five years. After that period degeneration is apt to set in because of the fixation of method in ruts — a mechanical habit grows on the teacher who does not readily see how his mannerisms look to other people. He becomes a pedagog in the bad sense of the word, and is a living caricature of his profession.

It would be supposed that what we have called the constructive method is a final one and good for all grades of pupils above the rank of elementary. There is, however, a difference between the method of elementary instruction and that of secondary; and a further difference between the latter and higher instruction.

The elementary course of study is adapted to the eight years of school life extending from the seventh to the fourteenth year of age. The course of study deals largely with what have been called "formal studies," namely with those relating to arts, such as reading, writing, and numerical calculation, and hence, as we have before seen, the acquirement of the use of technical words as tools of thought. Altho the distinction between formal studies and studies with a content is a superficial one, because all studies have a content, and the higher studies relate more to a content that is made up of forms — for example, higher geology relates to the laws of succession of the rock strata and to the laws of action of cosmic forces, and these laws are forms that govern the geologic facts of observation; or, for another example, in biology, science pays most attention to the mode of behavior of plants and animals, and behavior concerns the form of action, and this form of action determines the particulars of all life — the zoölogist would be unwise who should neglect the study of the modes of expression and communication of bees and ants, or of monkeys and crows, on the ground that language is a formal affair.

Yet we must admit that the child under fourteen years of age, when he has mastered the technique of knowledge in the elementary school, has not yet acquired much knowledge of human nature, nor of the world of facts and forces about him. He can grasp isolated details, but cannot make large combinations, nor perceive whole processes when they are complex.

It is, therefore, a necessary characteristic of elementary instruction, in comparison with secondary or higher, that it must take the world of human learning in fragments, and that, after all has been done to arouse thought and reflection, the memory will have more to do than the thinking power. The child cannot separate so well the personal equation from the results of his observation, nor can he help his warped views or his narrow prejudices. He is full of superstitions, and cannot discriminate readily between what he actually sees and what he believes that he sees because he expected to see it.

From these reasons it is obvious that elementary instruction is,

perforce, obliged to deal more with facts than with broad, general principles; that it must return oftener to the immediate object and dwell less on the process of its construction by producing forces. The training of the teacher in the habit of tracing a lower order of facts constructively into the higher order from which it has been derived makes him alive to the shortcomings of the mind of the child and more skillful in finding the facts that will serve as types of the process. If one is to describe in a word the success of the elementary teacher, he will say that he is successful in bringing typical facts before the mind of the pupil, and in stimulating the pupil to analyze them and find the law or principle embodied in them.

Every fact is a synthesis or combination. For every fact takes together a series of things and events, and also excludes other series of things and events. Let me illustrate this by the fact of the fall of the apple and the observation of the law of gravity by Isaac Newton. The fall of the apple was at first a fact of very small compass — so small, indeed, that a swine could comprehend it and hasten to appease his appetite by eating the apple! But the fact of the movement of the moon in its orbit was another fact that had no apparent relation to the fall of the apple until Newton happened to notice it, just then looking to see whence the apple fell and observing the moon thru the branches of the tree. But to Newton thenceforward both facts became one in the law of gravity.

It is easy to say that minds differ by the size of the facts which they are able to think. The child's mind is comparatively feeble and makes small combinations; the youth in the high school has gained in power of thought, and his facts are much larger and contain more heterogeneous elements — such as moons and apples, stars and mountains, land and sea and air, all tied together by gravitation.

Again, in this reference, the young man or young woman graduating from college has learned to think still more complex facts, and from three or four observations on a comet to map out its path in the sky, or from the form of a word and its meaning tell the grade of culture of the people that use it.

The postgraduate student who is concentrating all his studies on a narrow field comes in time to know it exhaustively thru his own observations, and to Cuvier a single bone of some extinct animal enables him to draw the entire skeleton, or to Agassiz a scale reveals the whole fish, or to Lyell a pebble tells the history of its formation under the glaciers.

It is perfectly obvious that the teacher must be all the time carefully observant of the power of synthesis in the pupil's mind; that is to say, of the caliber of the facts which he can think, and if he would be helpful to that pupil, he must know how best to strengthen his power of synthesis.

Secondary education deals with a second order of facts as readily as

elementary education deals with the first order. The second order of facts consists of a group of things and events systematically arranged so that each fact or event throws light on all the rest, and all the rest in turn explain it. Such a group is a science. The secondary pupil has for the predominating activity of his mind the connecting of facts and events into such scientific wholes, following the tradition left by investigators whose united labors have made these sciences and left them to the race.

To the elementary pupil a typical fact is the chief mental object. But to the secondary student the object is a fact of the second order, namely, a science in which a whole field of facts and events has run together into a higher fact. He is to learn how to see scientific relations everywhere.

Secondary instruction, properly so called, lays stress on this scientific unity, which swallows up the many facts of its province much in the same way that the sea swallows up its waves.

Secondary teachers need deeper studies such as can be found alone in the college or university. Because they deal with a tendency in their pupils to combine all primary facts into secondary facts or systems, they have to govern the spirit of their teachings by a still higher principle, and this is the unity of the sciences. We see that, as any given science is a second order of fact, so the unity of the sciences is itself a third order of fact.

It is the comparative method that dominates higher education, such as is given by the college or university in its academic course, which leads to the degree of bachelor of arts. For each branch of learning is studied in the light of all the others in a genuine college course; its method is the comparative method.

Recapitulating for the sake of clearness: (1) The infancy period of education in the kindergarten requires a method of instruction adapted to the symbolic and imitative stage of the mind. (2) The elementary school demands the method that can seize and analyze typical facts, these facts being of the first order, that is to say, facts that are not yet treated as organized into groups by science, but are capable of such treatment. (3) Secondary education requires the method which deals with the large facts that include entire groups of facts systematically arranged, while higher education deals with a still larger fact, namely the several sciences unified into a single group by the comparative method, so that each science helps explain all, and all each.

It is obvious that the method of higher education deals from first to last with a view of the world, a theory of the unity of nature and its purpose. It is the ultimate fact of the universe, what the poet Tennyson calls the

> Far-off divine event towards which the whole creation moves.

See every fact in its group, this is the scientific view. See every group of facts in the light of every other group, and you see the trend and purpose of the whole, and you possess a world-view.

It is true that a world-view is one of the first things given to the child by the family. It is given in the form of religion and on simple authority. But higher education has for its chief object the intellectual vision of the unity that makes the world an image of the divine Reason. That which was blind faith is to become intellectual and moral insight, as the result of the first part of higher education. But there is a second part of the higher education; it includes what is now called postgraduate work for the degree of Ph.D. This second part of higher education is specialized work, with a view to form experts. It requires the student to perform experiments in the laboratory and to undertake researches in the library, and it accompanies these with round-table discussions called "seminaries." In the postgraduate work the student selects a province so narrow that he may explore it thoroly and add by original research some new piece of knowledge to the stock of human learning already extant. The number of advanced students taking this course for three years in laboratory or seminary work has increased in twenty-five years from 200 to 5,000, or twenty-five times what it was in 1872. It is the work of the university proper, as contrasted with the academic or philosophic course of study lasting four years and leading to the degree of bachelor of arts. The method of instruction in this department of postgraduate work is that of free investigation, aided by the example of professors gifted in the art of original discovery. To mention examples, that of Agassiz will occur to everyone as an eminent teacher of the highest method of natural science; Joseph Henry in physics; Chauvenet in mathematics; Lotze in philosophy, and Wundt in experimental psychology; Woolsey in constitutional law; Stanley Hall in child study; Faraday in chemistry, and Huxley in biology. The list is too long to be printed here. But one will be able by these few names to recognize the method of the teachers of the specialists.

Beside, but apart from this class, stand the teachers of the college undergraduates, and the teacher of the teachers here is the professor who elevates into consciousness the method of giving young men and young women an insight into the world-view. Such men as the late Thomas Hill Green, of Oxford, and John Caird, of the University of Glasgow; Cousin, of France, and Schelling and Hegel, of Germany; Mark Hopkins, of Williams College, and Professor Minor, of the University of Virginia; Hickok, of Amherst College, and McCosh, of Princeton—these and others of the same type have shown power to train up teachers who are skilled in the method of higher education for culture — the undergraduate course, whose object is to see intellectually the unity of knowledge in philosophy and comparative science. Among the eminent teachers of

teachers in secondary education one thinks of Sturm, who may almost be said to have created the type of the academy as a fitting school for the college or university. Samuel H. Taylor, of Phillips Academy, Andover, is a good example of the teacher powerful in training secondary teachers, for he impressed his method very strongly on his pupils. Cyrus Peirce, of the first normal school in the United States, was emphatically the type of the instructor of teachers in elementary methods.

This survey of the five steps or stages in education and their differences of method brings us to the further consideration of the new era that is now opening for normal schools; for it is evident that no longer can the teaching of teachers be limited to one method, that of the elementary school. It must rather be a comparative study of methods investigating the proper way of presenting a given branch to a pupil in any one of the five stages, and discussing the modifications needed to adapt the subject to any one of the other four stages. In the department of education of the university the students will be taught how to present a branch of study symbolically according to the method of the kindergarten; by typical facts as in the elementary schools; scientifically as in the secondary school; comparatively as in the college; as a specialist would investigate it, in the postgraduate course.

Most important of all these methods is the true method of the academic or undergraduate course in the college. I have described it as comparative, dealing with the unity of the several branches of human learning and laying emphasis on the world-view implied by this unity.

The greatest additions to our educational theory will be derived from this study of method in the college. For it is grounded on the history of civilization (what the Germans name *Kulturgeschichte*). The comparative history of civilization — or, as it is called more frequently, the philosophy of history — furnishes the ultimate principle by which to solve the deepest questions relating to the course of study: the educational values of each of the several branches, the construction of school programs, the limits in educative power of the several component stages in the fivefold system of education beginning with the kindergarten and ending with specialization in the university, involving the much-discussed question of electives and substitutes in the course of study.

The discussions of these important questions will draw into controversy the directors of the present normal schools on the one hand, and the professors of education in the universities on the other, and the future history of the normal school will show the gradual adoption of the *Kulturgeschichte* standpoint — the discussion of all educational questions in he light of the history of civilization as a court of last resort.

DISCUSSION

[REPORTED BY J. H. VAN SICKLE]

MISS DUTTON. — Does your statement as to the excellence of normal-trained teachers apply to graduates of the ordinary city training school with its one-year course?

DR. HARRIS. — At what age are the pupils admitted?

MISS DUTTON. — At graduation from the high school.

DR. HARRIS. — Yes, my remarks apply to them.

MR. GREENWOOD spoke of the strictly professional work of the ideal normal school, the short average term of service of teachers, and the consequent need of a larger supply of teachers than the normal school adhering to the strictly professional course could furnish.

MR. SOLDAN. — Tho the movements in the kindergarten are symbolic, they go beyond that and furnish formal explanations in the most universal language, that of gesture.

Normal schools owe their origin to two sources, an ideal need and an actual need, which the particular school has to meet. High-school graduation is desirable as a condition for entrance. Rural schools should draw teachers from those who will understand the conditions. The normal school trains for a definite and uniform task, that is, to teach the studies common to all elementary schools. In high-school work no such certainty exists. Only the elements and principles that underlie all teaching can be taught to intending high-school teachers. The normal school for secondary-school teachers will lack the element prominent in the present normal school, namely, a review of studies in the light of how they should be taught.

MR. SHEPARD. — The geography taught in the normal school is not at all like the geography taught in the grammar school.

It is unfortunate that normal schools in the same state having the same courses and the same conditions of entrance graduate on different conditions. The normal school of the future will make differentiation a part of its plan.

The city training school with a course of one year cannot be ranked with one having a longer course. One year is wholly inadequate to bring about a teaching attitude. Two years at least should be required after graduation from a high-school course.

PRELIMINARY REPORT ON SCHOOL HYGIENE[1]

To the Department of Superintendence of the National Educational Association:

The undersigned, chairman of a committee appointed at the last annual meeting of this department to report on important topics relating

[1] A Committee on School Hygiene was appointed by President Schaeffer at the meeting of the Department of Superintendence at Chattanooga, Tenn., February 22–24, 1898, as follows:

W. T. Harris, Washington, D. C.; Frank A. Hill, Boston, Mass.; John R. Kirk, Jefferson City, Mo.; F. L. Soldan, St. Louis, Mo.; A. P. Marble, New York city; E. O. Lyte, Millersville, Pa.; W. E. Wilson, Providence, R. I.; W. L. Bryan, Bloomington, Ind.; W. A. Mowry, Hyde Park, Mass.

to hygiene in the schools, and to make recommendations for the further investigation of the subject, would hereby report that he has held consultation with the several members of his committee, by correspondence and in some cases by personal interview, and he finds all to be in favor of recommending a thorogoing investigation and report, to be prepared by experts, the same to relate to the essentials of hygiene and to present not merely ideals regarding the seating of schoolrooms, methods of lighting, heating, and ventilation, but to deal with the practical conditions as they are found existing in the school buildings in the United States.

The committee was appointed pursuant to the following resolution:

This department approves of the plan of creating a committee whose duty it is to make or cause to be made a scientific determination of the factors involved in the subjects of seating, lighting, ventilating, and heating of school buildings; and to this end prepare and present to this body at the meeting in 1899 a preliminary report setting forth the nature of the problems involved and its recommendation for the further prosecution of the inquiry — said committee to consist of nine members, as follows: the United States Commissioner of Education, two state superintendents of public instruction, two presidents of normal schools, two city superintendents, and two other persons.

It is taken for granted that the preparation of such a report would need an appropriation of money from the treasury of the association, and two plans have been proposed, the first of which contemplates the appointment of a committee of experts somewhat after the plan of the Committee of Ten, with an appropriation to be at least $2,500, or possibly a larger sum. The other plan proposes that a series of four prizes be offered for essays on the essential points of school hygiene, the same to discuss ideals and compare them with conditions that exist, in such a manner as to aid the teacher, the superintendent, and the members of school committees to criticise intelligently what they find in operation, apply cheap but effective devices to correct its defects, and decide rightly in regard to new models placed before them for adoption. The expense to the association may be much less on this plan. It might offer, for instance, only $100 for each essay, and in that case $400 would cover the entire expense of the four essays proposed. Or, again, a larger sum, $200, might be offered, and a total of $800 expended.

Whatever scheme should be adopted, your committee is of the opinion that neither the report of a committee of experts nor the special prize essays should undertake to exhaust the subject of school hygiene on the one hand or deal with vague generalities on the other; it should treat of each of the most important topics one by one, and so as to aid the teacher to make the best of existing conditions and enlighten public opinion on the subject of hygienic ideals or models.

In the hygienic literature of the time it is believed that too little care has heen exercised in discussing the essentials and in setting forth true theories and establishing them by clear demonstrations. The teacher does not wish mere authorities, mere oracular statements without proof.

He wishes the grounds of conviction, the reasons for the principles laid down; for the grounds and reasons help him to judge and make him a critical observer.

The existing books on school hygiene often present a bewildering variety of details, some of which are essential and some of which are of very remote utility. They often treat trifling details with as much fullness as principles which are vitally important. Another defect is that they give contradictory views on the most important topics of school hygiene, without critically sifting their grounds and aiding the teacher to choose better.

The topics named in the resolution adopted at Chattanooga are four in number: (1) seating, (2) ventilation, (3) light, (4) heating. Taking up these topics in their order, illustrations of the above-named will occur readily to anyone familiar with both rural schools and city schools. It will often happen that the visitor sees children in the primary grades, and sometimes in the upper grades, sitting upon benches too high to allow their feet to rest squarely upon the floor. The consequence of this is the congestion of blood in some parts of the lower limbs, and this may lead to aneurism or varicose veins, and perhaps to other evils quite as bad.

Again, it must be admitted that upward of 95 per cent. of the school buildings in the United States depend upon windows and doors for ventilation; instead of controlling currents of fresh air which enter the room by distributing them so that a thin sheet of air will come in only at the top of each window and get warmed before it reaches the floor, it generally happens that the room is carelessly ventilated in all weathers by opening windows at the bottom, and by making a large opening at the bottom of one window instead of small openings at the tops of all the windows. Hence a cascade of cold air pours into the room upon the shoulders and necks of the children seated nearest the window; and while some pupils get too much fresh air, other pupils get very little. The pupils seated nearest the windows grow up with tendencies to rheumatism and weak lungs due to colds that they have taken, and to congestions due to currents of air upon their heads and shoulders.

Again, as to lighting the rooms. The correct principles to be adopted for lighting a schoolroom require that the light shall come from the left side, from the back of the room, and two and one-half to three feet above the floor. The aggregate surface of the windows must bear a certain proportion to the depth of the room and to the surface of the floor. The windows must be placed along the wall, near together, in such a manner as to distribute the light properly to all parts of the room. It is, however, well known by all inspectors of schoolrooms that one-room schools in rural districts are quite frequently lighted from three sides, and that nearly all the children sit facing the light. It is true, also, that in some city schools children are seated so that the light comes from the

right side instead of from the left. Even in the cities which pride themselves on the amount of money expended in school buildings and on the enlightened progress which they have made in school architecture it is quite common to find rooms lighted from only one side, whereas the light, if possible, should come from the left side and from the rear, especially in localities which use soft coal for fuel. In that part of Germany where the plan of lighting schoolrooms from one side originated it is presumed that the schoolrooms are arranged so as to get northern light only; for a northern exposure does not need the use of blinds or window shades to shut out the direct rays of the sun. Where the only light comes from the east the direct rays of the sun will shine upon the pupil's book or face till 10 or 11 o'clock in the forenoon, unless it is excluded by window shades, and, if excluded, the room will not receive sufficient light for pupils on the side of the room farthest from the windows. Again, the room lighted solely from the south must exclude the direct light of the sun from 10 in the morning until 2 in the afternoon from the pupils who sit nearest the windows. The pupils sitting farthest from the window naturally adopt the habit of holding the books nearer to their eyes when the light is dim, and in this way become nearsighted; and, thru sympathy with the strain upon the eyes in study, the stomach becomes disordered. Nervous dyspepsia and headaches abroad in the community owe their origin, to some extent, to this defect in school buildings. Of course, the rooms facing the west get direct sunlight after 1 or 2 P. M., and incur the same dangers to pupils as the rooms facing the south or the east. Rooms that are lighted from the left and back of the pupil, having light from two sources, can provide against the alternative of direct sunlight or a deficiency of light. In the time of the Centennial Exposition of Philadelphia the National Educational Association had discussed so fully the necessity of light from two sources in a room, namely, from the left side and back, that very few new buildings were constructed with defects in this regard. It was settled that for large buildings there should be four rooms to each floor, one for each corner, and the pupils so seated that they would receive light from the left side and rear. Ten or fifteen years later large school buildings began to be built on plans that required six or eight rooms to each floor; besides the four regular schoolrooms occupying the four corners on each floor, two or four other rooms were placed between the corner rooms and were lighted only from windows on one side; and this, too, without reference to the point of compass which the windows faced; thus one room received light from the north and the other three rooms respectively from the east, south, and west. A strong child can endure, without permanent injury, the evils of bad lighting and ventilation, if the school attendance amounts to only eighty or one hundred days in a year, and he has plenty of exercise in the open air. But where the school attendance runs up to one hundred and

fifty or two hundred days, as is customary in cities, bad arrangements for lighting and ventilation become a much more serious matter.

Rural schools are often heated by an open fireplace, with wood as fuel. Where the chimneys do not smoke this method of heating gives plenty of good ventilation, and sufficient heat for the children seated near the fireplace or in the center of the room. Quite naturally the pupils in the outer rows of seats, near the walls of the room, suffer in cold weather from currents which move down the surface of the windows. After the open fireplace came the box stove, making one part of the room very hot and overheating the top of the room with the stovepipe, while other parts of the room and all places near the floor were cold. Poor ventilation took the place of the good ventilation of the open fireplace, and unequal heating still remained. The hot-air furnace, the steam coil, and hot-water pipes succeeded the air-tight stove.

Perhaps the best apparatus for ventilation is the costly steam fan, which pours into the room fresh air, first heated to a proper temperature by passing over steam coils. Heating and ventilation are so closely connected as to be substantially one process. By the fan propelled by steam, fresh air is brought in and the foul air is driven thru ventilating flues and thru the windows and doors. But this best apparatus is a luxury too costly for most cities. Various devices have been adopted to draw the foul air from the room into a ventilating chimney heated by the metallic smokestack extending thru its center from the basement to the top of the school building. The heat of the smokestack has the effect of warming the column of air between it and the walls of the chimney, and causing an upward current, which draws the foul air out of the bottom of each room with more or less efficiency; but it will be found that this ventilating system does not work equally well in all rooms, owing to the direction of the wind or to some defect in the construction of the flue. The ventilating fan, which forces the fresh air into the room, works well under all conditions.

One thing wanted is a series of simple directions by which a rural school of one room, or a city school in which no ventilating flues have been provided, may have fresh air without chilly currents. In some cases a carpenter with a few boards may build a flue, with an opening at the bottom of the room, by which the ventilation may be improved.

It is, of course, unreasonable to expect teachers to understand the principles of ventilation unless they know thoroly the theory of the dynamics of air and heat. They must be so familiar with this subject that they will conceive the air of the room, not as static, but as in a state of motion due to the constant movements of the pupils and to the changes of temperature caused by the heating apparatus. There is a constant access of carbonic acid, due to the exhalations from the lungs and bodies of the pupils. The teacher must realize that in a heated room the air

tends to escape at the top, and the cold air tends to come in at the bottom of the room. Carbonic acid, altho heavier than common air, rises to the top of the room when the air is heated and in motion. Nevertheless, the ideal method of ventilating the room is to draw out or force out the air at the bottom of the room. The teacher who understands the dynamics of heated air will know that the air does not leave the room at the bottom unless outside force is applied.

It is the opinion of the members of your committee that the prize essays, if called for, should be required to present in a brief and clear manner the rationale of these things.

If it meets the approval of this department, the four topics already named can be formulated so as to draw the special attention of a number of experts to the essential points to be considered, and secure such a discussion of the questions involved as will be of service both to the teachers using antiquated school buildings and to the trustees and superintendents seeking the latest and best models.

It is proposed that this report be referred back to the committee for further conference and for the formulation of the questions to be submitted for prize essays; further, that this report, thus amended and completed, be referred to the National Council of Education by this Department of Superintendence for such consideration and action as may seem advisable in view of all the circumstances. To the Council belongs the business of looking into the expenditure of the moneys of the association for such matters as special reports and prize essays. The following resolution[1] embodies these recommendations, and is herewith reported for your action:

Resolved, That the preliminary report of the Committee of Nine appointed at the Chattanooga meeting of the Department of Superintendence to make or cause to be made a scientific determination of the factors involved in the subjects of seating, lighting, ventilating, and heating of school buildings, be referred back to said Committee of Nine for further discussion and for such modifications as may seem to them proper; and that said amended report be brought to the attention of the president of the National Council of Education, with the request from this body of superintendents that its recommendations be considered and such action be taken as in the opinion of the Council may further the best interests of education.

Respectfully submitted,

WILLIAM T. HARRIS,

Chairman.

BUREAU OF EDUCATION,
Washington, D. C.

[1] This resolution was then adopted by the Department of Superintendence at its meeting in Columbus in February, 1899.

THE DIFFERENTIATION OF THE AMERICAN SECONDARY SCHOOL

BY CHARLES H. KEYES, PRINCIPAL OF HIGH SCHOOL, HOLYOKE, MASS.

In ordinary educational parlance the term "secondary school" stands for the institution which immediately succeeds the primary or elementary school. The elementary school occupies the child for the first seven to nine years of his school life, and, in the language of the report of the Committee of Fifteen, "deals with the immediate aspects of the world, with the particular instances rather than with the general forms." It exercises discipline, chiefly in apperceiving, imagining, and remembering. It should furnish the child the tools of knowledge needed for all subsequent education. The school which takes the pupil for the next three or four years, admission to which presupposes the substantial completion of the elementary curriculum, is the institution whose differentiation is to be considered. The term will thus cover all the schools above elementary and below college grade. This common interpretation of the term is both convenient and comprehensive, and no other exactly covers the group of institutions which are neither distinctively elementary nor collegiate, which contain today over 600,000 students, and command the services of more than 25,000 teachers.

1. The differentiation to be considered is the variation in the character of the curriculum to meet the distinct aims and conditions of varying classes of pupils. In public education in the United States this differentiation is due largely to variation in aim. Public elementary schools present no differentiation, for the simple reason that the aim is everywhere practically the same, giving the normal child mastery of the common tools of knowledge, and furnishing the minimum training for citizenship without regard to social class, sex, or condition.

When the secondary-school age is reached, special aptitudes and limitations begin to manifest themselves more markedly; social and physical differences to assert themselves. Pupils begin to select, with more or less definiteness, spheres of activity in life, and to demand that their future education shall directly aid in realizing these chosen ambitions. Parents recognize limitations, and ask the school to make concessions to these conditions. In an endeavor to discover what differentiation is to be, and be justified, there will be no more promising way to begin than by studying what has been, and examining its justification.

2. In American secondary education, differentiation has taken place on the basis of (*a*) control, (*b*) sex, (*c*) comparative educational values, and (*d*) closely specialized aim. On the basis of control we distinguish

secondary schools as public and private; each of which groups presents as subclasses all of the fifteen variations produced on the basis of sex, completeness, and specialization. It is important to notice the reason for the existence of private schools. They are five in number: (*a*) to preserve social class lines and cultivate social exclusiveness; (*b*) to meet conditions of special limitations in physical or intellectual power; (*c*) to meet the condition of lack of amenability to ordinary modes of control, lack of self-control, etc.; (*d*) to inculcate special forms of religious faith and practice; (*e*) to meet tastes or wants so closely specialized, or of a character so far in advance of common appreciation, as not to be a fair charge upon the state.

3. Recognition of sex conditions and sex aims has given us our secondary schools for girls exclusively, as well as our boys' secondary schools. In public education the tendency seems to be in the direction of eliminating this basis of differentiation. The annual report of the United States Commissioner of Education for 1895 shows but twenty-five secondary public schools, out of the 4,118 reporting, which are not co-educational. In four of these, moreover, the differentiation is not on the basis of sex alone (they are manual-training high schools for boys). Of these twenty-five schools (thirteen for girls and twelve for boys), thirteen are in New England, New York, and Pennsylvania, and ten in the southern states, one in Chicago, and one in San Francisco, the only one in the western half of the union. Boston has four; Philadelphia, Louisville, and Baltimore, three each; New Orleans, Lancaster, Reading, and Brooklyn, two each; Atlanta and Augusta, with San Francisco and Chicago, have one each. Thus it will be seen that nearly all are in cities more than a hundred years old. All but two are in what are generally classed as the conservative states. A number of them were established before co-education had been either attempted or theoretically justified. The United States Commissioner's report for 1896 presented reports from 4,974 public high schools, of which all but forty-one — twenty-one for girls, and twenty for boys — are co-educational. Of these, six are manual-training high schools for boys only. The South furnishes nineteen; New England, New York, and Pennsylvania, seventeen. Of the five remaining, three are in Indian Territory, one in Chicago, and one in San Francisco.

But this almost uniform public policy in secondary education is not to be misinterpreted. There is one phase of the question of co-education which has been settled for all except dyspeptic philosophers and freshmen correspondents of college papers. The ability of a girl to do as much and as well as a boy in intellectual pursuits, and her equal right to equal opportunity at the hands of the state, have passed out of the arena of debate, not to mention the forum of sound thinking. But girls and women have another right in these premises, and that is the right to do

a girl's or woman's work in a girl's or woman's way. Someone has sarcastically remarked that, in the "eyes of English law, husband and wife are one, and that one is invariably the husband." With a great deal more truth it may be remarked of many co-educational schools, with their fixed courses of study, uniform treatment of all pupils, false notions of regularity and impartiality, that under our policy a boy's school and a girl's school are one, and that one is the boy's school. In our co-educational colleges, with numerous courses and large elections, without any such absurd insistence as that every day must mark the performance of an equal fraction of the week's, or month's, or year's work, with special gymnasiums for women, and directors of physical culture, we minimize the evil results of our misinterpretation and maladministration of co-education.

It is manifest that co-education is bound to obtain in our secondary public schools. But co-education does not necessarily mean identical education either as to subject-matter or method. Wisely interpreted it means a boy's right to do a boy's work in a boy's way, in the same institution and side by side with the girl's exercise of her right to do a girl's work in a girl's way. The rights of each are equal to, but not identical with, the rights of the other. It no more follows that membership in every class or department of the secondary school ought to be open alike to every boy and every girl than the membership on the football team or military company ought to be open to the girls, or that the girls' gymnasium, or special course in physical culture, ought to be open to the boys. This view of secondary education plants itself on a clear recognition of the structural and functional differences of the sexes. It notes the all too frequent physical deterioration of secondary-school girls. It believes that it is not by accident that in the vast array of private schools but a small percentage of those of secondary grade are co-educational. This view, if sound, is not an argument for the abolition of co-education, but it contributes strongly to a view of differentiation which is one of the chief deductions of this study. This conclusion is equally reinforced by a critical consideration of the third and fourth bases of differentiation, and its formal statement is deferred until these shall have been examined.

4. Differentiation on the basis of comparative educational values has given us in different parts of the country four great types of secondary institutions, viz.: the Latin high school, the English high school, the manual-training high school, and the complete-culture high school. Each of these four types has subdivisions presenting as true differentiation as can be secured thru separate institutions. The Latin high school virtually houses two schools: (*a*) the ancient classical school and (*b*) the modern classical school. The English high school offers usually what may be called (*c*) literary, (*d*) scientific, and (*e*) English courses. The manual-training high school presents two types of courses: (*f*) the science

manual-training and (*g*) the English manual-training course. The last differentiation I have chosen to call (*h*) the complete-culture high school. These eight might be classed in three groups: those whose avowed aim is simply to prepare for life, and those which declare that it is their mission to give every individual pupil the kind of secondary education which is best adapted to his special condition, aptitude, and aim.

The first group maintains that the highest self-realization comes thru the college, and if one cannot go all the way, it is best to go just as far as one can along this most desirable road. The second group insists that for the pupils who cannot go to college an entirely different path should be followed. As the great majority do not go to college, and the public school is for the majority, they repudiate preparation for college as a prime responsibility. The third group rejects this doctrine that the high school is for the majority, and insists that it is for all, and that therefore its business is to meet both these ends. As the first group would not advocate the fixing of a curriculum exclusively for one college, and the second group would equally decline to specially prepare for one particular calling, so the third group insists on meeting only the more general needs of all classes.

THE EIGHT TYPES

Let us note particularly the characteristics of each of these eight types. A careful examination of courses of study from sixty-four secondary schools scattered thru twenty-nine states, and a personal study of some typical high schools of New England, Wisconsin, and California, prompt the conclusion that we will rarely find two schools whose courses of study are identical. There are variations in subject-matter, proportion, and sequence, and yet all readily fall into one of these eight classes. The first, with ancient classical courses, makes Latin, Greek, mathematics, English, and history its chief subjects, the first three receiving most attention. History, English, and occasionally a single scientific subject complete the course. The special emphasis placed on the first two subjects is the distinguishing characteristic of this class.

The second class has what I have called modern classical courses. Latin, French, and German are the characteristic subjects; English, mathematics, and history, with possibly a little natural science, complete the course. The Boston Latin School, Phillips' Academy at Andover, Philips' Exeter Academy, and the leading denominational academies of the country furnish good types of these two classes. Both classes furnish college preparation; in fact, until very recently they alone constituted the group of college-preparatory schools, altho they are not genetically fitting schools. Many of the oldest and most distinguished of these schools proclaimed their purpose at their foundation to be "the promotion of piety and virtue and education of youth" in certain designated branches

and others which might later be added; some sought to prevent "learning from being buried in the graves of their fathers;" still others, "that wicked and scandalous living might be prevented and youth be successfully trained up in virtue and in useful knowledge." For a long time they were the only types of secondary schools in the country; they were naturally resorted to by pupils seeking to fit for college. The work they did naturally had an influence in determining what must be the earliest work of the new colleges that were to take their students. In like manner the colleges influenced the shaping of new secondary schools founded for the especial purpose of fitting for college.

The third of these eight classes of secondary schools offers what I have styled a literary course. English literature and history are its characteristic subjects; Latin or modern language takes a subordinate place, and serves to reinforce the literature; mathematics and science maintain places in the course. This course has not, as a rule, been used as a college-preparatory course, but has been very popular with pupils whose education was to terminate in the high school. It has suffered more in administration than any of the eight types now under consideration. This is largely due to the fact that its emphasized subjects were ones which, until recently, have been poorly taught in college, and not made prominent test subjects for college admission, thus furnishing to the secondary schools poorly equipped teachers for this work.

The fourth of these eight types has the scientific course. Natural science and mathematics are the characteristic subjects; modern languages, English, and history furnish the remainder of the discipline. This course has for fifteen years enjoyed large popularity "as preparative for life." This appreciation has been due doubtless to the general scientific development of the age and its application thru inventive talent to the economic activities of the race. Excellent examples of the third and fourth types are furnished by nearly all the public high schools of the middle West.

The fifth is found with English courses. The characteristic subjects are English literature, history, rhetoric, and composition. Along with these, mathematics and science occupy the places of next importance. As the name implies, no other language than English appears. This is one of the non-college-preparatory courses, and excellent examples of it are found in many of our public schools.

Under these five types may be included the vast majority of the public schools of the country, altho it is true that many schools present a commingling of the characteristic elements of all these types. Whenever no attempt at differentiation appears and one fixed course of study is offered, it almost invariably includes all five of the following elements, viz.: language, literature, history, mathematics, and science.

The sixth and seventh types of secondary schools have been developed

in America since the year of the Centennial Exhibition in Philadelphia. They were the result of study of some of the Russian school exhibits and expositions of courses of study. Philosophical criticism of these Russian manual-training school exhibits brought many thoughtful American teachers to believe that to the language, mathematics, literature, history, and science, industrial art must be added if the school curriculum was to furnish material for the development of the appreciative, interpretative, expressive, and creative powers of youth. In secondary-educational circles the first step was taken at St. Louis in 1879 by Dr. C. M. Woodward. The success of the St. Louis Manual Training School was such that within ten years similar schools were established at Baltimore, Chicago, Toledo, Eau Claire, New York, Philadelphia, Omaha, Cleveland, Cincinnati, St. Paul, Minneapolis, and New Orleans.

We might naturally expect to see the introduction of the new feature along with the most valuable elements in each of the five types thus far considered. This would result in giving us about equal modification of all the five existing types. But this was not the case; the exploiters of the new experiment were in too many instances mechanical rather than artistic. They were moved by the need of a basis for fuller exercise of the creative powers, but failed to see the art possibility suggested by the new element. The result was that manual training was at first emphatically mechanical and narrowly utilitarian. Its subject-matter was added to the fourth and fifth types only, giving us for type No. 6 the science manual-training high school, and for type No. 7 the English manual-training high school. So far as the traditional branches characterizing types 4 and 5 were concerned, practically no change in sequence or proportion was made to form the sixth and seventh types.

The element of distinction in the new courses was that into each day's work was put an hour of drawing, chiefly mechanical, and two hours of shop-work. The drawing was the basis of the shop-work, and was closely interwoven with the natural science and the mathematics. The courses first developed were for boys only, but Toledo soon set the example of a manual-training school for both sexes, which was shortly followed by other cities. Joinery and turning, forging, pattern-making and -molding, and machine-shop practice were the divisions of manual work on the creative side for the boys. For girls clay-modeling, wood-carving, sewing, cooking, and garment-making were the corresponding subjects. For both a progressive course in drawing was provided. These schools became popular, and enjoyed the double function of preparing for scientific and engineering colleges, on the one hand, and furnishing the so-called practical discipline for life, on the other. The comparatively large cost of equipment and scarcity of teachers and competent managers have unduly restricted the number of these schools, altho the success of those established has been phenomenal. The Pratt,

Philadelphia, Toledo, Menominee, Chicago, Cambridge, and Denver schools furnished the best examples of these two types of secondary school.

The eighth type, or complete-culture high school, is the result of an endeavor to survey and classify the world of knowledge, to understand the general characteristics of mind, and to recognize the special conditions of the individual learner. The six elements of its curriculum are language, mathematics, science, history, literature, and art. It does not allow either æsthetics or mechanics to control the interpretation of the term "art." Art means beauty, fitness, adaptation. Æsthetics as well as mechanics are to be considered. Under this view the relation of industrial art to the ancient classical or the modern classical or the literary course is as definite and full of meaning as its relationship to either the scientific or the English course. A study of the general characteristics and mode of growth of the mind prompts still more strongly to the conclusion that this sixth element of the course of study is a reinforcement of each of the other five. Experience with special conditions, aptitudes, and limitations of large numbers of individual learners compels the conclusion that truest pedagogy demands an almost infinite differentiation — not by institution alone, but by course and subject as well.

On these premises the eighth type of school furnishes the subject-matter of all the seven preceding courses and makes up the course of the individual thru wise selection, keeping in mind his special condition, fitness, aptitude, aim, and liking, as well as the necessity of involving in his secondary education something of all six of the elements — language, science, mathematics, history, literature, industrial art. It prescribes certain minima in mathematics, English, science, history, and art, and then allows the pupil's special needs to determine the remaining elements of his course. This type of school preserves, in a certain sense, the grouping of the first seven types, and, while avoiding over-specialization and preventing absolute ignoring of any of the six great essentials, does offer as many chances for sub-differentiation thru election as there are pupils in the school.

This differentiation avoids undue waste of energy and money in administration and equipment, gives the strength of many-sided co-operation, furnishes the enthusiasm of number, develops the cosmopolitan rather than the provincial spirit, prevents the growth of intellectual and social caste that is always dangerous to the state. It affords all the pupils equal opportunity, limited only by their own capacity and adaptation.

SPECIALIZATION OF AIM

We come now to consider the differentiation of secondary schools on the basis of close specialization of aim. This has given us distinctively conventional secondary schools. They are seven in number. But there

is every reason to believe that the first five are in the rank of secondary schools but temporarily. The transition to a higher place is everywhere beginning, and in many states is already accomplished. These are schools of law, medicine, dentistry, pharmacy, and normal schools. Even where admission to these schools is still possible with only elementary training, their matter and methods are partially collegiate, and this fact accounts for much of their lamentable failure. The instructors and managers of such schools everywhere have seen this, and are striving to remedy this condition by demanding as a prerequisite for admission the completion of at least a secondary-school course. Then there is in the minds of many a hope that at no distant day still greater advances may be made, and at least three of these schools transferred to the post-graduate rank. The law and medical schools of a few of our universities, and notably Harvard and California, have already announced this position. I believe that a mere consideration of the work to be done by members of the profession trained in all five of these schools will compel the conclusion that they have no place in the ranks of the secondary schools.

The two remaining types are the commercial high schools and the mechanics' arts or trades high schools. The aim of the first is to give, along with general training, the cultivation, special fundamental and technical preparation for the large group of callings which we characterize as commercial. It sees in its pupils the men who are to fill the stores, offices, and banks, as managers, clerks, accountants, secretaries, etc. It proposes, then, that its course of study shall contribute to making its graduates rapid, legible penmen, accurate accountants, ready correspondents and bookkeepers, good stenographers and typewriters. It seeks to give them mastery of commercial geography and history and elements of business law. It studies language for the sake of expression and address. It selects modern language on the basis of commercial utility. It is a course which may make for culture, if wisely administered, but which needs to be guarded against the danger of being unduly cheapened. In many schools it is shorter than the other courses by one or even two years. The demand for this type of secondary school is manifestly on the increase, and with the introduction of civil-service-reform methods in municipal and state as well as federal government, this demand is bound to become stronger. If it is true that it is the business of the school to prepare the pupil for his work in life, such a school has high justification.

TRADES HIGH SCHOOL

The other remaining division of these closely specialized or semi-vocational secondary schools is what I have called the mechanics' arts or trades high school. As its name implies, it aims to meet the wants of those who are to go into shops, mills, and manufacturing establishments,

as artisans, merchants, draftsmen, etc. It reduces to a minimum the culture students of an English or scientific course in order to find time to make each pupil a reasonable master of the elements of one trade. It recognizes, however, that it has a larger mission than apprenticeship. We live in an age of invention, which is in every decade eliminating some trades and completely transforming others. The cultivation of versatility is all-important, and the most successful trades high schools are those which propose for themselves on their strictly technical side the teaching of a boy all about the foundation of one trade, and a little of the underlying principles at least of a number of trades. Such a boy is not to be eliminated from the category of the self-supporting by the invention of a machine. With the growing complexity of our civilization, density of our population, the keenness of commercial, manufacturing, and mechanical competition, independence and self-support demand of the hand-worker more skill and larger productiveness. When this is not forthcoming, misery and suffering must follow. The state sees that its own perpetuation and strength depend upon the devotion of the poorest as well as the richest classes. It recognizes the wisdom of furnishing such training to increase the productive power and happiness of its citizens. With this in view, much attention deserves to be given to the consideration of trades high schools. Probably one of the best types of a trades high school in our country is found in this state in the Lick School of Mechanical Arts in San Francisco.

Having thus indicated what differentiation has obtained in practice, and hinted at the justification urged for each type, let us see if we can draw a few warrantable conclusions.

The existence of so many courses is due to the conviction that there is no warrant for the assumption that either the same order or same combination of studies is the best means to highest self-realization for all pupils. Judged by the completeness with which they help those who receive their training to make the most of themselves, these courses may be said to stand on nearly or quite equal footing. As preparation for life's work, the course of a good Latin school, that of an English high school, and that of a scientific school seem equally efficient. The power one gets from history and science another gleans from classics and mathematics, and so on. The failure that one makes of Latin another makes of mathematics, and still a third of history. The reasonable deduction is not simply election of courses, but election of subjects.

The historical conclusion is reinforced by scientific reasons as well. Among the leading contributions from child study, the inductive study of the natural history of the human race, is this: Mental power is the result of intense effort. Interest always attaches to the work of our choice rather than the assigned task. Other things being at an equal, greatest power will result from teaching a pupil the subjects of his choice and

aptitude — not those for which he has seemingly neither liking nor capacity.

Must not the ideal high school cease to prescribe any but the essential tool of progress? If its business is to give the pupil four years of opportunity "to make the most of himself," in a high sense of the expression, must it not content itself with insisting that he shall do four full years of thoro work, comprising continuous effort along some line, and such additional subjects as he under wise counsel shall elect?

DISCUSSION

[REPORTED BY WILLIAM F. KING]

MR. GOVE asked with how small a school such a course of study could be made practicable.

MR. KEYES answered that he knew of a school of 110 pupils and four teachers in which this course was successfully carried on.

DR. HARRIS said that the secondary schools of the United States are not moving in that way, as evidenced by the fact that 48 per cent. of all the public high schools of the United States are studying Latin, and 47 per cent. of the private schools, and the number studying Latin has increased nearly 50 per cent. since 1890. The Bureau of Education annually takes the statistics of the pupils pursuing secondary branches of study — so many studying Latin, so many algebra, and so many in each other branch, geometry, physics, Greek, French, German, etc. If a pupil is studying three or more of the secondary studies, he is counted in the list of secondary pupils.

E. W. COY thought that a school conducted on the elective plan would be so expensive as not to commend itself to the taxpayers; also that the difficulty of adjusting programs and administering the school would make the plan impossible. He doubted the wisdom of giving the pupils their full choice in the "go-as-you-please" high school.

MR. KEYES replied that after a thing has been done it is too late to say that it cannot be done; the question is not, Will it work? but, Does it work? He saw pupils separately, and used all means to determine the best definite course, not in a "go-as-you-please" manner, but constantly keeping before the mind how much power is to be gained, rather than how the pupil is to make his bread and butter.

MR. VAN SICKLE, speaking from an experience of several years with such a school, now enrolling 475 pupils, said that the idea of its being more expensive than the school with fixed courses is erroneous. Before the classes are so large as to require division this would be true, not afterward. Such a plan would increase the work of the principal, but the principal's chief usefulness is in safeguarding the interests of individual pupils. He believed in differentiation, and would carry it out so far as to let the number of studies carried depend upon the physical and mental strength of the pupil. He would not set a time limit for graduation, but would graduate whenever conditions as to quantity and quality of work had been met.

MR. VAN SICKLE.—Do you require each pupil to carry just four studies, no more, no less ?

MR. KEYES.—By no means. Physical and intellectual conditions determine the quantity of work the student is permitted to carry. Some students prefer to take five years to complete the course ; others wisely take partial courses ; while students of special vigor may even complete the course in three years.

MR. VAN SICKLE.—Do your pupils recite five times a week in each study ?

MR. KEYES.—No ; pupils give five periods per week to each regular study, but these are so arranged as to give double periods (eighty minutes each) on alternate days, save Fridays, when a single period is given to each study. Pupils carrying regular work have thus two lessons to prepare for each day, save Friday, when the assignments are for practically half the work required in each subject on the other days.

MR. GREENWOOD asked whether it was common to give eighty minutes to the recitation in manual-training high schools. He also requested that Principal Morrison, of Kansas City, be permitted to speak of his method of recitation.

MR. MORRISON, after speaking very appreciatively of Mr. Keyes' paper, said that in the Kansas City High School the eighty-minute period was mostly in laboratory work. Last year they tried the experiment of having all classes eighty minutes each, and, in the main, found it satisfactory. Out of 1,100 pupils only fifteen voted to go back to forty-five-minute periods. The pupils seemed to have done the work easier.

E. E. WHITE.—I am glad to see that the doctrine of individualism which the writer mentioned in the first part of his paper was all taken back in the last part. The child in these secondary subjects is not competent to choose. He may think he is choosing his courses, yet he is doing so only under the limitations of prearranged courses.

While we can applaud this theory of individualism in theory, it is abandoned in practice. How can a person who is ignorant of the subject determine whether he has an aptitude for it or not ? There are very few who do not, under good teachers, do well in all subjects. All the pupils of our schools are to meet the demands of a civilization, and need to prepare for them. Nine-tenths of the American people do not choose their life-work, but it is forced upon them.

MR. GREENWOOD.—I hold that parents, children, and teachers have much to do in selecting courses. After conference selections are made by pupils themselves.

MR. BROWN.—I thoroly agree with both parties. I believe in individualism, and I believe in law and order, and the law of the school. I believe in making a study of every case.

MR. BAKER.—I also believe in blending the two. I must still believe that to make a good man and citizen should be the ultimate aim of our schools.

DR. HARRIS did not believe that one subject is as good as another. We should examine these branches on the basis of results. He compared the results in studying arithmetic with those in making a joint in carpentry, where less of character was developed, especially if the joint is filled with sawdust. He also showed how some kinds of manual training unfit for others.

MR. KEYES closed the discussion saying, in part, that this discussion presumed upon a state of affairs that did not exist. We do not insist that the child shall select his own studies. Again, the character that will come out of a sawdust-stuffed joint is about as good as that produced by a "ponied" lesson in Cæsar.

DISCUSSION OF REPORT OF COMMITTEE ON NORMAL SCHOOLS

[SEE PROCEEDINGS OF THE DEPARTMENT OF NORMAL SCHOOLS]

[REPORTED BY MISS LUCIA STICKNEY]

MR. GREENWOOD.— What is said of the influences of the inner life of the normal school upon the social, personal, and moral development of the pupil applies equally well to the college, the university, and other institutions. The schools described here are to be classed as the best schools of today. So, too, the principles of administration set forth in the report apply to all other schools. I have secured a large number of copies of the report, to be sent to all principals in Kansas City. Principals of all schools should be supplied with a copy.

MR. GOVE.—The same problem that we have hitherto had to face arises: how to secure the best work in the normal school. These pupils in the school we are to have as our associates. Why do we not select for the school the best material to make up the school? The one who holds a diploma of a normal school ought to be better qualified for teaching than a college graduate, but the first year's work of the normal graduate is not likely to be satisfactory, and that of the college graduate is usually more valuable. I think the normal school does give the scholarship that it assumes to do, but it does not give enough. The professor of pedagogy is too often an amateur.

MR. HOOSE.— From a mere glance at the report I heartily indorse it. I commend the thoughtfulness with which the word "method" is used. The method grows out of the conditions in which the pupil learns a thing. We do not try to tell why a trout at a certain time of year catches this fly and not that one. I sometimes think that common-sense defined on p. 8 as "an intuitive knowledge of common affairs" is the most uncommon sense in practice. A Frenchman has defined it as "spontaneous action of right reason." Where a hundred persons have common-sense on general matters, not one has it for the particular case needed. Is it possible to increase the proficiency of the common-sense of normal-school pupils so that it may come before the emergency — be ready beforehand, on top? To illustrate: When a man hunts a bear, if common-sense is on top, he shoots on the instant when he gets where the bear is. We too often train teachers as those who train boys to swim without going into the water. What is culture? The definition has not yet been found. Culture is, I take it, the bloom on the peach. We do not grow the bloom, but grow the peach, and let the bloom take care of itself. The college student goes off with his scholarship and personality free. The normal school graduate goes out mastered by forms.

INSPECTOR TOWNSEND, of Hawaii.—The question should be considered, "What sort of criticism is best?" The pupil is easily driven out by criticism. In Hawaii much of the work done is in language. The policy should be to point out the correct method rather than to find fault.

MR. GREENWOOD.— I wish to call attention to the thought expressed on p. 34, that good executive management means harmony, not discord; confidence, not distrust; unity of effort, not uncertainty of purpose.

MR. SNYDER.—Method is a process not hampered by form. Common-sense should be the fundamental condition for entrance. Individuals lacking in common-sense should be excused from the school. The method of appointing local members as trustees is undesirable. We should appoint competent members, and oppose the appointment of incompetent members whose recommendation is based on social relations. The school should not be burdened with numbers. Three hundred pupils are enough.

MR. WHITE.— How is it that the normal schools are often manned by those without experience in normal schools?

MR. SNYDER.—That is in accordance with Mr. Tappan's law: the teacher is trained in a higher school than the one in which he teaches.

DO WE NEED A UNIVERSITY TRUST?

BY L. D. HARVEY, SUPERINTENDENT OF PUBLIC INSTRUCTION, MADISON, WIS.

The modern trust is a logical product of evolutionary processes in industrial organization. It renders it possible to cheapen production by better organization, and at the same time to furnish a better product with better service and cheaper distribution to consumers. It prevents the ruinous competition which results in poorer products for the consumer and bankruptcy for the producer. It renders possible an undue advance in prices whenever the trust controls production. These are the advantages of the trust. For the purposes of this paper it is unnecessary to speak of the disadvantages.

The advantages of bringing the management of various concerns engaged in the same line of production under one organization are obvious from an economic standpoint.

Is it not possible to secure corresponding advantages from an educational standpoint by the application of the principle underlying the organization of the trust to the organization of graduate work in the state universities supported largely by taxation? Many of these institutions are now attempting to carry on a large number of lines of graduate work, resulting in duplication of equipment, instructional force, and experimentation. Each university is anxious to carry on as many lines of graduate work as any other, with the result that increasing appropriations are asked for, and even when obtained they are not sufficient to provide such quality of equipment, and a sufficient number of professors adequately prepared, in order to do work of the highest grade. In some cases, in order to keep pace with a rival university, or to meet the demands of zealous heads of departments, the management diverts the funds needed to properly carry on the undergraduate work, in order to do mediocre and attenuated graduate work. Professors are multiplied in the graduate departments; students are few in those departments, but numerous in the undergraduate department, where, in the freshman and sophomore classes, they are taught mainly by tutors, instructors, and assistants, coming in contact but little with the regular professors.

No one questions the necessity of having the highest order of talent in charge of the graduate work. Without such talent the work is a farce. No one has any right to question the necessity for the highest order of instructional talent in the undergraduate departments. When the funds which should be devoted to securing such a teaching force for the large body of undergraduates in these institutions are diverted to the extension of the graduate work, without even securing a high order of that work, it

is an unwise perversion of public funds, an outrage upon the undergraduates and the people of the state, and a departure from the purposes for which these institutions are chartered. This is perhaps a strong statement, and yet I believe it to be no stronger than the facts warrant. The young people entering these universities have just come from the high school. Many of them are inadequately prepared to begin the university course, and few of them have learned how to study to advantage. The classes they enter are usually the largest in the university, and here, if anywhere, do they need the guidance, inspiration, and instruction which high character, broad scholarship, experience, and proved power in teaching and training students in modes of study can alone supply. Many of the young men who as fellows, instructors, and assistants are given charge of the instruction in these classes are persons of excellent scholarship in special lines, but they are not yet teachers in the highest sense of the term. The individual who two months ago was a high-school student has not been born anew mentally this month, because of enrollment in the freshman class in a university; his mental aptitudes, powers, and limitations are about what they were two months ago. He is entering, however, upon the most serious educational business he has yet undertaken, and if, as the university authorities tell us, much of his training has been poor, and his preparation inadequate, is it not incumbent upon the university to take him as he is, and to adapt the university instruction to his needs? This instruction cannot be safely trusted in the hands of persons who are lacking in teaching experience and skill in teaching.

No one can successfully combat the proposition that the state universities were created for the primary purpose of giving good collegiate instruction to the young men and women of the state prepared to begin collegiate work. Whatever extension there may have been of this idea in recent years, so as to open up and offer additional lines of work, no state university has yet outgrown the necessity for doing this collegiate work thoroly well. Until that work is being done thoroly well, those charged with the management of these institutions have no right to use a dollar of the public funds for graduate work. If the collegiate work is thoroly well done, then they have no right to use a dollar of the public funds for graduate work, if by so doing they lower in any way the character of the undergraduate work. Demands for increased appropriations for the maintenance of state universities are made at every session of the legislatures of the states wherein they are located. That these demands have been acceded to by the legislatures in most cases shows the high regard in which these universities are held. The difficulty in securing larger appropriations increases year by year, in most states, and it is a fact that there is a growing tendency among the people to criticise the rapid increase in expenditure, and to question the wisdom of expenditures for

lines of investigation which are of necessity expensive, and which few students seek.

There is no question in this paper of the value or importance of graduate work. It is a question of business administration, and of fair dealing with the people of the state. It is much the same question which has confronted the heads of industrial organizations in competition with each other, and out of which has grown the trust. State universities cannot hope to draw unlimited sums from taxation for the extension and support of graduate work. Unless the demands in this direction are lessened, the appropriations are liable to be curtailed by the legislatures, and it is altogether probable that the retrenchment will go deeper than the graduate work, and seriously affect the undergraduate work.

I take it that the problems which the university managers have to solve are these :

1. How to secure and offer to the people of their respective states the highest grade of instructional work possible in the regular collegiate courses from the beginning to the end of these courses, and at the same time to convince the people generally that this is regarded as the first duty of the university to the people who maintain it.

2. To organize those departments of graduate work for which there is the greatest demand, not from the professors, but from graduates from the collegiate courses, to the extent to which the funds available will warrant, after provision is made for carrying on the undergraduate work at the highest degree of efficiency.

3. To limit the number of lines of graduate work offered so as to make it possible to offer facilities for doing whatever work is attempted as well as it can be done anywhere, without increasing the demands for appropriations so as to weaken the support of the people thru their representatives in the legislature.

Is it not true that in most of the state universities where graduate work is attempted the quality of instruction given in the collegiate courses is far below what it should be? Is it not also true that many of these institutions are attempting to carry on graduate work for which they do not have proper equipment, and where men of the highest order of ability are lacking as heads of the various departments? Is it not true that the extension of this graduate work has created a feeling of unrest and dissatisfaction among the people in many of the states? If these three propositions are true, then some remedy should be sought, and at once. Does not the development of the idea out of which the trust has grown point the way? If the state universities, or at least that group of them situated in the north central states, should combine and apportion the graduate work, limiting the amount to be done in any one institution to what it can undertake to do as well as it is done anywhere in the world, and abandoning all other graduate work, we should have introduced an

economic feature of organization which must commend itself to intelligent business-men, and, I believe, would commend itself to the people generally. Such a plan would enable each institution now carrying on a considerable number of lines of graduate work, many of them poorly, to abandon those lines in which it is not strong, and to concentrate its energies upon lines where the best results might be secured. With the work thus apportioned, and the strengthening of the undergraduate work which would be possible by making available for that purpose the funds now used in maintaining weak departments of graduate work, the graduates from the collegiate departments could then go to such institutions as offer the special lines of work which they wish to pursue further. They would then be sure of securing as good facilities as could be found anywhere for the pursuit of their chosen lines of investigation. The strengthening of the collegiate work, which would result from placing in charge of the freshmen and sophomores strong teachers of recognized ability and experience, would send out students far better prepared to do advanced lines of work than are most of those students who now complete the collegiate courses. Such a plan of organization would commend itself to the public in that it would recognize as the first work of the state university to furnish good collegiate instruction for all the students in attendance. No committee or board would hesitate to go before a legislature and plead for increased appropriations if they could show that they were to be used primarily for this purpose, and no legislature would refuse to respond to such an appeal. Such a plan of organization would command the respect of practical politicians and members of the legislature, to whom the universities must look for funds, and would put them on a solid foundation of popular support. With the education of public sentiment which would grow out of this plan of organization and of the reputation which might be built up for the few lines of graduate work attempted, those lines could be broadened, and others, perhaps, undertaken in the future, as the necessities of the case might warrant and the education of the people would allow.

That there are some difficulties in the way of such an organization is recognized, but that they are insuperable it is not believed. I do not attempt to indicate the detailed plans by which such an agreement could be reached, but I believe they can be readily worked out. This plan of organization embodies the beneficial features of the trust organization, but without introducing the features which are dangerous. It enables such a use of the capital invested, and of the annual funds, as will give the largest returns for the purposes intended. No one will seriously maintain that the present system does this. Is it not a matter which should be taken up seriously by the heads of these institutions and discussed from the standpoint of business administration?

DISCUSSION

[REPORTED BY MISS LUCIA STICKNEY]

MR. BAKER. — This subject is not new to the members of this association. It has been the experience in Colorado that graduate work in small classes has occupied the time of the professor at the expense of the larger classes of undergraduates, and that graduate work has thus interfered with the undergraduate work. Every university should provide for advanced study sufficient for a master's degree, rather than give honorary degrees to all who have kept out of the penitentiary. We have been conservative in granting the doctor's degree. There should be one university in each state, and this should be the state university, which furnishes the opportunity for acquiring the highest degree. However, a group of institutions might combine to give the required work for such a degree.

MR. GOVE. — Is the university in Wisconsin crippled by rival institutions?

MR. HARVEY. — It has been the tendency in Wisconsin to push to the front the graduate work, and the college work has thus been made inefficient. A reaction will come. We should lop off some lines of work and thus strengthen the institution in the minds of the people. They say: "You are using money to pay men who have only half a dozen students; the work will be better if there are fewer lines of work."

MR. GREENWOOD. — How will you break down the pride of the politician, and how will you get the student to rush from one institution to another?

MR. HARVEY. — It is not the pride of the politician, but of the professor, that maintains these higher lines of work.

MR. WHITE. — How such a trust can be formed should be discussed by college men, and they are not here. All universities, so-called, are doing college work. There should be a national university, but each state university wants to be *it*.

MR. HOOSE. — How will it touch denominational pride?

MR. HARVEY. — It will not touch it.

MR. GREENWOOD moved that the report be referred to the Committee on a National University. Carried.

PSYCHOLOGY FOR THE TEACHER

BY E. C. HEWETT, NORMAL, ILL.

It has seemed strange to many that a discussion has sprung up recently concerning the question whether psychology is of any assistance to the teacher in conducting his actual work in the schoolroom. If a knowledge of the qualities of lumber is of value to the carpenter, if a knowledge of soils and fertilizers is of value to the farmer, if a knowledge of trees and shrubs is of value to the fruit-grower, if it is well for the stock-raiser to know by what means and process calves and pigs grow and thrive, it would surely seem to be of importance to the teacher to know the laws of the mind's activity and the resulting processes for its stimulating guidance and growth. In fact, this is so obvious that not only no elaboration of

argument seems to be necessary, but it really would appear to be pedantic or childish. We must believe that any contest between intelligent men which can arise on such a question must be due to some confusion respecting the meaning of the terms they use.

Some recent articles in the *Atlantic Monthly* and the *Educational Review* by Professor Hugo Münsterberg, of Cambridge, have probably done more than anything else to stir up and intensify the debate as to whether the study of psychology is of any direct value to the individual teacher in his practical work. His articles are not easy reading, but it is very apparent that he means by psychology something quite different from what many understand it to be. Further, it is evident that he has been ruffled and disgusted by a great deal that is going forward under the names of experimental child psychology, physiological psychology, etc. He claims that much of this work is not psychology at all. He says: "I maintained that the individual teacher cannot make any direct use of physiological and experimental psychology for his teaching methods."

He stoutly asserts that psychology is not dependent on physiology, however intimate may be the unknown, and perhaps unknowable, relations between the facts of consciousness and the atomic movements in the brain, or other parts of the physical system. He says: "In my lectures on psychology before my students I do not speak a word about the brain centers and ganglion cells; and to base on them psychological insight turns our whole knowledge topsy-turvy." And again he says: "There was never a teacher who would have changed his educational efforts if the physiological substratum of the mental life were the liver or the kidneys instead of the brain."

It is easy to see, then, that he regards a vast deal of the matter collected by those who pursue investigations in child study, experimental and physiological psychology, etc., as having no possible value for the teacher in his work, if indeed it has value for anybody. It will also appear that he regards much of his work as making no part of real psychological study. He says: "Psychology is a study of mental facts; but not every study of mental facts is therefore psychology." He considers, further, that much of what is collected and painfully tabulated concerning the mental activity, acquisition, and thinking of children has no psychological worth except as it may throw some new light upon our knowledge of mind in general. A collection of mere facts which throw no light whatever upon the general laws and movements of mind, or which illustrate merely the laws already known, can have no scientific or practical value for psychology. As he puts it: "It is not science to make even the most exact statistics of the pebbles on the road, and to collect the description of some hundred cases where the law of gravitation was confirmed by the falling of apples."

He declares that "the world of science and learning, as well as the

social world, has its alternating seasons and its capricious fashions . . . . favored by both the leaders of knowledge and the crowd of imitating followers." Such, evidently, he considers much of what is going on in the educational world at present respecting the things of which he is writing. Clearly, in his opinion, a great deal of attention and effort is now directed toward a fad "by both the leaders of knowledge and the crowd of imitating followers."

In a recent letter an intelligent friend who is familiar with the educational work in one of our state universities expresses an opinion that would tally very closely with that of Professor Münsterberg. He says of this work: "A little genetic psychology, the psychology of play, of dolls, of the knee-jerk, of muscles, of sand piles, of foods, a little hodge-podge called child study, of instinct, of adolescence, of senility, of physiology, of biology, and so on, *ad infinitum*." Only, probably, Professor Münsterberg would deny that most of what my friend has here called psychology is really psychology at all.

Professor Münsterberg holds that the work of investigating children, by the teacher in school, is unfair and injurious to the teacher himself. We note three points in his contention respecting this matter:

1. That the teacher, or the mother, or the nurse, is unfitted to conduct observations upon children, by direct experiment or otherwise, which will have value for science. He says: "The work must be done by trained specialists, or not done at all." It is manifestly unfair to require anyone to attempt to do what it is, in the nature of things, impossible for him to do successfully or profitably.

2. That such work overburdens the teacher by requiring him to undertake a thing alien to his legitimate work, when his hands are full, or more than full, of the work which really belongs to him. He says: "He [the teacher] needs every minute of his school hours for his lessons; and he stands, too often, before the dilemma either to follow his educational conscience or to follow a superintendent who believes in the newest educational fad." Again he says: "That child study which has for its aim only a collection of curiosities about the child, as an end in itself, may be grateful to the nurse who writes down some of the baby's naughty answers, or to the teacher who sacrifices half an hour of her lesson to make experiments in the class-room, to fill out the blanks that are mailed to her."

We think it does not need much argument to convince intelligent schoolmen that the legitimate work of the teachers is enough for all their time and powers; that there is often, in the regular machinery of the school system, a good deal of work demanded that might well be spared; and that there is a constant tendency to crowd into the school things that have no right to be there. In this state of things it is unwise and unjust to require the teacher to sacrifice a half hour even of her lessons for

matters not legitimate, whether the results are "grateful" to her or not. It would be better that she should have an "educational conscience" and follow it, than to sacrifice it for the "newest educational fad" even.

3. That for the teacher to attempt such work with her pupils puts her into a wrong mental attitude respecting them. This, we suspect, is the most serious of the three. Anything like a true psychological study of the child, such a study as is demanded by the psychology that is meant by the author whose writings we are considering, requires that he should be regarded in a way quite different from that in which his teacher should regard him. This will appear more clearly further on. The teacher should see in the child a complex unity, in most essential respects, like herself, demanding a sympathetic, integral treatment. Any psychologically scientific experimenting with the child, or even the probing of him for mere facts to be tabulated, demands that he should be regarded as a specimen to be dissected and analyzed. And, as Professor Münsterberg well says: "A teacher feels himself hampered by this new way of looking on the children, not as friends, but as interesting results of psychological laws." He says, further: "I consider it to the teacher's credit that the child is not an object of analysis for him, but I blame those who make the teacher believe that his observations, nevertheless, have value for psychology."

This last sentence suggests, what is very true, that, when Professor Münsterberg uses the word "psychology," he means something very different from the vague and undefined notion which the word awakens in many minds — perhaps in most minds. We are not at all sure that we could write a definition of psychology according to the professor's conception of it, and we are quite sure that we have not space in this paper to elaborate it, even if we could do so. But we will try to give some notion of what he means, as we understand him; and it will be readily seen that it is something not identical, by any means, with the common notion.

He says: "Psychology is the science which describes and explains mental phenomena." This statement has no strange sound; it seems simple enough. But it appears that the describing and explaining of mental phenomena by the psychology that he means is something peculiar and restricted. As he says: "It was my point from the start that not every interest in mental life is psychology, but that psychology studies mental life from a special point of view."

This "point of view" seems to be to look at the study of mental life in a way precisely similar to the study of physics, and the phenomena of physical objects — and strictly according to the modern theories of evolution. He speaks of this kind of psychology as "atomistic," "naturalistic," etc. He says: "The natural science of mental life began perhaps fifteen years ago." Its method he describes as that of "dissolving its

subject into atomistic elements, and the explanation of natural laws without regard for the meaning or value." "Psychology," he says, "teaches only to decompose man." "The limitations of psychology are easily understood. It considers the mental life as an object which must be analyzed and explained, analyzed in elements and explained by laws." This strictly demands that, in the study of mental phenomena, as in physics or chemistry, one must rigidly confine himself to the analysis of their elements and the inevitable working of unchanging laws. The mind is to be studied as a non-living thing, like a rock or a chemical compound. Münsterberg further says: "Psychology thus presupposes a most complicated transformation of the reality; and any attitude toward mental life which does not need or choose this special transformation may be anything else, but it is not psychology."

With such a view of psychology, it does not seem very difficult to answer the question whether the teacher needs it for direct use in the daily school work.

Münsterberg says: "You destroy the values of our practical life, if you force on them the categories of psychology. In experimental psychology, or in child psychology, emotion may show itself as composed of circulatory or muscular elements, and the will made up from muscle and joint and skin sensations; but if you offer such transformed product to the teacher, you do worse than if you offer to the thirsty man one balloon filled with hydrogen and one filled with oxygen instead of water. The chemist is quite right, that *is* water. The fainting man insists that it is not, and life always speaks the language of the thirsty."

He further shows that the outcome of such a psychology can never lead to a notion of personality or free will, as we interpret these terms in the language of real life. By this psychology, as he says, personality is an "idea which is endlessly more complicated, but, in principle, not otherwise constituted, than the idea of our table or our horse; just as from the point of view of chemistry, the substance we call the human body is in principle not otherwise constituted than any other physical thing."

From his description of psychology, the psychologist's conception of free will is something very different from that free will which we feel in ourselves and exercise every day of our lives; something very different from that free will which we recognize in our fellows, and for which we hold them responsible. He says: "The psychologist can easily construct a conception of freedom which is in the highest degree realized in the psychological organism; in its psychological experiments, freedom of will means to him absence of outer force, or of pathological disturbance, in the causation of our actions." Respecting such a free will he says: "If the perceptions and associations and feelings and emotions and dispositions are all given, the action must necessarily happen as it does.

The effect is absolutely determined by the combination of causes, only the effect is a free one because these causes were lying within us." Regarding such a free will as explaining the actions of real men in history he says: "Do we mean, in speaking of Napoleon and Washington, Newton and Goethe, (only) those chemical processes which the physiologist sees in their life, and those accompanying psychical processes which the psychologist enumerates between their birth and their death? Do we really still think historically, if we consider the growth of the nations and this gigantic civilization on earth as the botanist studies the growth of the mold which covers a rotten apple?" He even declares that "the will is not at all an object of psychology."

He says further: "Practical life and history, mental science and poetry, logic and ethics, religion and philosophy—all deal with mental life, but never with psychology as such." It is evident from this that psychology and mental science are not synonymous terms, in his thinking; that psychology signifies only a restricted and technical view of mental operations. He declares that "psychology has the right and the duty to consider everything from the psychological standpoint." But he would have us to understand that this view does not embrace the whole of the reality, nor the most important part of it. He says: "The view of man as a free being, as history must see him, is exactly as true as the view of man as an unfree being, as psychology must see him; and the friends' and the educators' view of the child as the indissoluble unit and willful personality is just as valuable and true as the psychologists' view, which sees it as a psycho-physical, complex mechanism." Further: "The child is to us in real life no vegetable which has to be raised like tomatoes, and the criminal is no weed which does not feel that it destroys the garden."

"Psychology," he says, "may dissolve our will and our personality and our freedom, and it is constrained by duty to do so; but it must not forget that it speaks only of that will and that personality which are by metamorphosis substituted for the personality and the will of real life." "The psychical mechanism has no advantage over the physical one; both mean a dead world without ends and values — laws, but no duties; effects, but no purposes; causes, but no ideals." "Psychology can be, and in this century has been, the last word of a naturalistic attitude toward the world."

Thus we have endeavored, at some length and by copious quotations from his own writings, to set forth what we conceive to be Professor Münsterberg's meaning of psychology. It surely is not the general knowledge of the mind and its activities which is usually understood by the term. And we think all will readily agree with him that such psychology has little or nothing of direct value in the work of the teacher with his pupils. In these quotations and elsewhere the professor clearly shows the limitations and shortcomings of such a science. But he, by no

means, esteems it as worthless. It has its place, its methods are legitimate for its purpose; yea, he contends stoutly that education may ultimately be greatly helped by it. Not, however, by any direct use that the actual teacher can make of it in his daily work; but by the modifications of educational theory which may come from it thru the efforts of expert students of that theory.

Having now paid our respects sufficiently perhaps to naturalistic, scientific psychology, to the psychology which one has termed "introspecto-physiologico-scientific psychology," and having agreed as to the futility of the study of the knee-jerk, the brain cells, and the rest, as a guide to the practical work of teaching, the question remains whether the teacher can study mental activity in such a way that he shall gain something from it for use in his everyday work. Certainly the teacher has to deal with "mental life, but never with this psychology as such." The teacher has always had to deal with mental life; and no one has ever been a successful teacher who has not had some good degree of knowledge of the fundamental facts of mental life, however unscientific that knowledge may have been, and however unscientific the steps by which he acquired it. In all the most practical things of life, doing has preceded scientific investigation. Men talked, and talked effectively, before scientific grammar or rhetoric were ever dreamed of. Men sang, and probably played on musical instruments, before the science of music was developed. Men raised crops successfully before there was any scientific knowledge of the chemistry of soils or of the laws of plant growth. And, in all these things, so far as they were successful, they acted in accord with nature's laws, altho those laws had never been scientifically formulated.

Moreover, we think that scientific knowledge is not knowledge of a *different kind* from that which is obtained by common experience and observation. It is the same kind of knowledge, only it is rendered more complete, more precise, more systematic, more available, by scientific investigation. In my boyhood I often watched an old basket-maker as he fitted his hoops onto his baskets. He applied the piece of wood out of which the hoop was to be made three times across the basket's top; then, allowing a little more, he cut it off. I doubt if he ever had heard the word "circumference" or "diameter;" I am sure he had never investigated their relation mathematically. He knew nothing of the Greek letter π, but his hoops always fitted.

Now, we are not saying that scientific knowledge is not better than knowledge of this empirical, haphazard kind. But we do say that, in order to teach well, the teacher must, in some way, know the fundamental facts of human nature and of mind-activity; and the more thoroly he knows them, the better. In addition to the knowledge of the general facts, he needs to know the peculiarities and idiosyncrasies of the individual pupils under his charge. Here, then, is a double field of observation

which should accompany and guide his daily work. But not the kind of observation which Münsterberg denominates "atomistic," "naturalistic," etc.—not such an observation as requires one to look at the child as a non-living specimen, simply to be dissected and analyzed and explained.

We are quite sure that Münsterberg himself would approve the kind of child study that we are now advocating, for he says, in so many words: "Certainly the teacher ought to study children and men in general, but with the strictly anti-psychological view; he ought to acknowledge them as indissoluble unities, as centers of free will, the functions of which are not causally but teleologically connected by interests and ideals, not by psycho-physical laws."

To any thoughtful student of school work, and of popular notions concerning education, it must be apparent that a great many people, including a great many teachers, do not give proper consideration to some of the most fundamental and most palpable facts of human nature. At bottom is the fact that the essential characteristic of mental life, in all its forms, is self-activity. Whatever potential mind may be, actual mind manifests itself only thru self-activity. Educationally the teacher can do nothing for the child intellectually or morally, except as he works thru the child himself. Instructing, teaching, lecturing, exhortation, preaching, example — all are powerless, except in so far as they induce the proper activity in the human object.

Dr. F. A. P. Barnard says: "I would remark that a man's education must be mainly his own work. He may be helped, or he may be embarrassed, by his environment; but neither books, nor teachers, nor apparatus, nor other surrounding conditions of any kind will be of any avail unless he himself furnish the energizing spirit which shall put them to account. A mind is not molded as an earthen vessel is fashioned by the hand of the potter. It molds itself by virtue of an inherent force which makes for symmetry or deformity, according to the direction given to it by consciousness and will.

"Libraries, universities, museums, and foreign travel are powerful auxiliaries to a man who is determined to be educated; but he will find them of no avail if he makes them anything more than secondary instrumentalities in the work. On the other hand, no lack of such advantages will prevent a man from securing a valuable education, who is resolved to educate himself. Witness, for instance, a Benjamin Franklin, a Hugh Miller, a Michael Faraday, and an Abraham Lincoln."

All this seems obvious enough when we think of it. And yet a failure to recognize this truth lies at the bottom of what we call "mechanical" teaching. The child is regarded as a sort of mechanism to which, or with which, something from without can be done directly. It would seem that a complete acceptance of the psychology which we have been

considering would tend to strengthen such mechanical views and processes; whereas it seems to us that most of the real improvements in education during the last fifty years have been along the line of a fuller recognition of the truth we are now considering. And we will add that it appears to us that many of the well-meant efforts for moral reform and spiritual uplifting have failed, and are failing, of their purpose for the same reason — that is, that they have been, and are, along mechanical lines.

Closely allied to the thought just considered is the fact that the human being, child or man, must be regarded as a true personality, possessed of a true will, which he may freely exercise, and for whose exercise he is responsible. George P. Brown says: "Any sort of theory of education that fails to recognize the primal fact of rational psychology, that the human soul is potentially a morally free, because a self-active, being, is a delusion and a snare." In the light of this principle, all efforts for the intellectual growth of the child must aim at inciting his will to act in the desired direction, and that, too, in the way of a conscious personality. Rooted in this principle is all that has been done and is doing, if it is wise, to promote the agreeableness of study to the child. Make learning pleasant, is the modern cry. Why? In order that the child may pursue it more willingly. Herbart's plea for "many-sided interest" rests ultimately on the same ground. And may it not be true that the heathenish maxim of the old pedagog, "No lickin', no larnin'," was a twilight recognition of the same principle, in that its aim was to make the pupil will to learn thru fear of pain?

In the same way, successful attempts to build moral character in the child must work along the same line, that is, thru his own will. Committing moral precepts to memory, study of the theory of ethics, advice, and even example of the wisest and best teachers and friends, study of the Bible, and the soundest and most eloquent preaching — all are as useless in building character as the whistling wind, except in the degree in which they stir and rouse and direct the center of the child or man; that is, his personality and his active will.

We are inclined to think of government as something from without, something imposed upon the will of its subject — and such it often is. But government in school serves no permanent and valuable end except as it leads the pupil into the way of right self-government. True, outward restraint is often necessary, as well as punishment for transgression, but it is of little or no real value unless it tends to form the habit of inward restraint. And when the habit of inward restraint is once thoroly formed, outward restraint is not felt by the pupil. He is "free from the law," because he is inwardly ready to do, from his own motion, the things that righteous law demands.

Besides the great central facts of human nature to which we have just

devoted these few words, there are several other facts equally well established, which it is for the highest interest of the teacher to regard, and about which his knowledge can never become too complete or too dominant in shaping and directing his daily work. On these points judicious child study will clarify his present knowledge; and, at the same time, it will extend its boundaries.

To some extent, but not sufficiently, teachers do recognize the fact that there is one law of growth for muscle and mind alike, viz., *the law of proper exercise.* As the arm of the blacksmith grows strong by constant use, so the power of the mind to observe, to remember, to compare, to reason, and the rest, grows by proper use in each of these fields of its activity. In this way, and in no other, can it gain the power to do anything which it cannot do at present, and to do what it can now do more effectively. And, as the unused muscle becomes shriveled and atrophied, so the mind that fails to exercise itself in any of its modes of activity gradually loses even the power it now has.

Another most important law belongs to body and mind alike; that is, *the law of habit.* By repeated use of a muscle in a certain way it becomes possible for us to do, easily, correctly, and almost or quite automatically, what is done at first slowly and awkwardly, and yet at the expense of much care and labor. Just in the same way the mind "learns to do by doing." Whether an oft-repeated thought "wears a channel in the brain," or how else it is done, is for the teacher an unimportant question. But that the mind does form habits, as the body does, is a matter of tremendous significance for him. It would not be far from the truth to say that the forming of habit is the chief business of education. In fact, Rosenkranz does say that habit is the universal *form* which education takes. Those who are so ready to condemn "ruts" unqualifiedly should think on this matter. Habits are ruts; they "lead us along the lines of least resistance." It is not a question whether ruts are valuable in education, or elsewhere. The significant questions are: What kind of ruts? And are we so firmly "stuck" in them that we cannot get out if need be?

The law of imitation is one that is often too little understood, and too little regarded by teachers, especially by teachers of young children. Almost, if not quite, all the first steps in a child's education originate in his propensity to imitate. How else does he begin to walk, and to talk, and even to eat as soon as he goes one step beyond drawing sustenance from the mother? Now, whether this fact has any bearing on the doctrine of the relationship between men and apes need not trouble the practical teacher much; but it is of great importance that he should understand the working of this law, its uses and abuses in the processes of education.

The large part which sympathy plays in the work of education is greatly underestimated, as we believe. Nor is it easy to tell whether sympathy between teacher and pupils or sympathy among the children

themselves cuts the larger figure. Evidently, there is a connection between imitation and sympathy; but it may not be worth the teacher's while to spend much time in investigating that connection. Still less is it necessary for him to study profoundly the connection of sympathy, as shown by human beings, with sympathy as shown by some animals. Such study may have important bearing upon the doctrine of Darwinian evolution, but it hardly demands much effort from the practical teacher on that account. But it is more important than most teachers think that they should understand how the sympathy of pupils with one another may sometimes hinder their work, or how it may help their work if wisely used. And we firmly believe that the teacher's success or failure, both in teaching and molding his pupils, depends upon nothing else so completely as upon the bond of sympathy between them. Hard, indeed, is the fate of the little one who falls into the hands of an unsympathetic teacher. A sympathetic look, even if it carry a reproof with it, will often be found more effective than a switch, in preventing mischief. A word of sympathetic praise, worthily bestowed, generally will accomplish more to forward the child in right efforts than a whole lecture of criticism and blame, even if it should be just.

Space forbids that we enter further into particulars concerning facts of human nature and the phenomena of mind activity. Of course, the teacher should understand the received doctrine concerning the three chief forms of mental activity, known as intellect, emotion, and will, and about the relations of these forms of activity to one another. He ought, also, to have knowledge about the subordinate forms of mental action, like perception, memory, reasoning, etc. We know that many modern writers on psychology are severe on the doctrine of mental faculties; and justly so, if the faculties are regarded as parts or divisions of the mind itself. But it is certain that the indivisible mind works in these various ways; and if a faculty is understood to mean merely one of these forms of activity, or the mental ability to work in one of these ways, we can see no objection to retaining this term to signify that for which some term is imperatively needed.

The field for mind study and for child study is large enough; and the results of such study should have the highest value in the practical, every-day work of the teacher; and all this without any meddling with that kind of psychology which Professor Münsterberg asserts the teacher does not need.

DISCUSSION

AARON GOVE agreed with Mr. Hewett in the general positions taken in the paper, and said that only the scientific investigation of the subject usually mentioned as child study

was valuable. The amateur child study was futile. He protested against the "blanks" sent in such profusion to be filled out, often for the mere gratification of students who are thus assisted in preparing their theses.

J. H. Hoose agreed heartily with the general position of Dr. Hewett and of Mr. Gove, and said that he could not conceive it possible that reliable observations could be made by persons not scientifically trained. The most healthy kind of school work is child study, in the sense of coming into a sympathetic understanding with the children.

J. M. Greenwood stated that child study is of advantage to education, for it is a sign that the teachers are becoming interested in the children. Many teachers are pretty good psychologists without reading a great deal of psychology. "I say, open the doors, encourage the teachers to study psychology and physiology, Professor Münsterberg to the contrary notwithstanding."

EDUCATIONAL PROGRESS OF THE YEAR

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The task which has been assigned me is difficult in proportion to its brevity. It would not be impossible to set down in formidable array the main events of the year, at home and abroad, in the field of education, and, had the Council patience and adequate wakefulness, to recite them in its presence; but Homer's "Catalogue of the Ships," over which no schoolboy has ever traveled except in morbid curiosity or in punishment, would be lively by comparison. For reasons, then, of comfort and convenience, as well as those which rest upon a sense of relative values, I shall select for mention and brief criticism only those happenings which seem to me most to deserve the emphasis which will be laid upon them.

During the period under review there stand out prominently in the United States two series of events which are eminently characteristic of the tendencies and movements most manifest among us. These are the striking additions to the literature of education which have been made by Americans, and the study and constructive thought which has been devoted to the problems of public-school organization and administration in large cities.

For two generations Americans have been writing and publishing books upon the theory and practice of education which were on too low an intellectual plane to meet the needs of today. They belonged to the literature of the camp-meeting rather than to that of the study. They were undeniably well-meant; on the whole they did great good. But they were not nutritious as a steady diet. On their pages the obviously axiomatic jostled the eternally commonplace. There were exceptions, of course; but out of the fifty best-known books on education which were published here between 1830 and 1890 certainly more than two-thirds

must be condemned as unscholarly. The reason is not far to seek. Scholarship and care for education as such were divorced. The colleges had rolled the Baconian half-truth, "Knowledge is power," under their tongues so long that it made other condiment unnecessary. Meanwhile, the elementary schools and the normal schools were suffering from lack of the scholarship which only the colleges and the yet unborn universities could give. The scholars looked askance at the schools as something beneath them; the schools, unmindful of the fate of perpetual motion, undertook to live on their own scholarship alone. The results were not happy.

Now all this is changed. Dating, perhaps, from President Angell's success in 1879 in securing the foundation at the University of Michigan of the chair which has been successively occupied by Payne and by Hinsdale,[1] and from the elaborate presentation of education as a university subject made by President Barnard of Columbia in 1881 and again in 1882,[2] the movement to bring the upper and the elementary schools together in mutual understanding, and in a spirit of sympathy and co-operation, began to gather headway. It grew rapidly, and in 1894, when the president of the oldest American university, one which had stoutly resisted the inroads of education upon it, made his notable address upon the "Unity of Educational Reform," pointing out clearly the fact that the same principles must govern educational effectiveness at whatever stage of development it is sought, the victory was won. For years before this President Eliot had himself been a conspicuous example of the new spirit, and now it has come to pass that that university which does not pursue education as energetically as it pursues physics or classical philology is no longer upon a pinnacle. Times have changed, and most intelligent men have changed with them.

The most noteworthy feature of the educational literature of the year is its complete reflection of this new and inspiring point of view. It treats school topics with the seriousness, the care, the scientific method which mark the scholar. Homilies upon education have disappeared before the study of education. As a result we have the beginnings of an American literature of education which will be permanent.

It will not have escaped notice that during the past twelve months, or a little more, there have been books published by Mr. Eliot, by the late General Walker, by Mr. Gilman, by Mr. William James, by Dr. Münsterberg, by Dr. Hinsdale, by Mr. Thomas Davidson, by Miss Blow, by Bishop Spalding, and by Dr. Harris, which illustrate my meaning. Even the purely literary critic, accustomed to scorn the study of education, or, perhaps, of anything except the speedy removal of one impression by another, will not hestitate to call this group of books remarkable. They

[1] Payne, *Contributions to the Science of Education*, p. 337.

[2] *Reports as President of Columbia College*, 1881, pp. 38–50; 1882, pp. 51–65.

are so remarkable that two decades ago they would have been impossible. Each book reflects the peculiar genius of its writer; taken together, they give us a true picture of the forces and ideals which are moving our educational scholarship and grappling with our educational problems. Mr. Eliot's *Educational Reform*[1] reveals the unfolding of a program of effort and achievement, framed thirty years ago, but broadening as it unfolds and gaining power in development. Its terse, virile English appeals directly to the heart as well as to the head of democracy. If every teachers' meeting and every institute to be held during the next year were to have read to it the address on "The Function of Education in Democratic Society," with which the volume ends, it would be time excellently spent, and the lives and the work of the teachers would surely show its influence.

General Walker's interest in education was both general and special, and his *Discussions in Education*[2] faithfully represents this fact. He labored by word and by deed to organize manual training and technical education as they should be in a great, all-inclusive educational scheme like ours. He lived to see the institution over which he presided, tho sadly hampered thru lack of funds, recognized as a leader of its class. His statement of the argument for manual training was everywhere held to be most cogent, and his policy of reform in the schools and colleges rang with the note of leadership.

The scope of Mr. Gilman's volume is narrower, as its title, *University Problems*,[3] indicates; and yet, just because of the many points of contact between the university of today and life, the several papers it contains are in no sense technical.

These three books are themselves enough to indicate that the higher education is assuming its share of responsibility for education as a whole, if there were no other evidence whatever. These books are in a class by themselves. All three are catholic, all three are in the true sense practical. Their authors are men whose lives have been spent in tracing practice upon the background of theory, and hence their books are an example as well as an exhortation.

Mr. William James, our master-craftsman in psychology; Dr. Münsterberg, whose welcome is the warmer because of our appreciation of his strenuous idealism; Dr. Hinsdale, who has for the first time set before us with historical faithfulness a picture of the great educational upheaval which Horace Mann brought about; Mr. Davidson, whose exposition of Rousseau is as fascinating as his exposure of the fallacies contained in the theories of that erratic genius is scathing; Miss Blow, with the simplicity of mastery in revealing the philosophy of Froebel; Bishop Spalding,

1 New York: The Century Co., 1898. 418 pp. $2.

2 New York: Henry Holt & Co., 1899. 342 pp. $3.

3 New York: The Century Co., 1898. 319 pp. $3.

with spiritual insight and sure literary touch; and Dr. Harris, with the subtlety and comprehension of thought which have taught us all, are the remaining writers on education who have made the year memorable.

Mr. James presents in the concrete[1] his reply to the much-mooted question: How can psychology be made practically useful to the teacher? He does not argue; he demonstrates. At his hands mental life is all simplicity and naturalness, and we turn with satisfaction and delight to a book on psychology, both authoritative and readable, which can safely be put in the hands of the youngest teacher. It ought at once to drive into the darkest corners the superficial and third-rate manuals of psychology which are so often pressed upon teachers, and which in their construction exemplify perfectly the motto made familiar by our journal of humor, *Life*, "Aut scissors aut nullus." Dr. Münsterberg's[2] book is of a different sort. It interprets life and life's interests in terms of psychology, and it interprets psychology in turn in terms of life. It is truly a great book. To be understood and appreciated, it must be taken as a whole, and viewed in its true light as a contribution to the world's philosophy. Dr. Hinsdale[3] and Mr. Davidson[4] take us by the hand thru the field of history. They show us the beginnings and the meaning of much which is now current among us. The Boston schoolmasters of sixty years ago talked and acted very like their successors of today in New York, Chicago, and San Francisco. They had the same excellences and the same defects. History seems to be repeating itself, and we feel depressed. Not even Horace Mann's great nature seems able to move the dead-weight of tradition and of Bumbledom. But Mr. Davidson helps us to cheer up. What an attractive rogue Rousseau was! How influential and how absurd! What a dance he must have led the musty old pedagogs of Europe! It is all very fine and very amusing—at a century's distance. But we must not be caught with that chaff of his twice. Nowadays we ask rather severely what "education according to nature" means. According to whose nature? According to what nature? After listening politely to the answers of Rousseau's apostles of today, we refuse to be convinced that nature means nakedness, and we continue to hold that man has made himself some intellectual and moral clothes during all these centuries.

Miss Blow, with happy insight, gives to her exposition of the philosophy of Froebel the title *Letters to a Mother*;[5] for the mother only less

[1] *Talks to Teachers on Psychology.* New York: Henry Holt & Co., 1899. 301 pp. $1.50.

[2] *Psychology and Life.* Boston: Houghton, Mifflin & Co., 1899. 286 pp. $2.

[3] *Horace Mann and the Common School Revival in the United States.* New York: Charles Scribner's Sons ("Great Educators" series), 1898. 326 pp. $1.

[4] *Rousseau, and Education according to Nature.* New York: Charles Scribner's Sons ("Great Educators" series), 1898. 256 pp. $1.

[5] New York: D. Appleton & Co. ("International Education" series), 1899. 310 pp. $1.50.

than the child is the object of the kindergarten's influence and care. In her brilliant pages the same spiritual philosophy shines forth which Dr. Münsterberg uses to light up and explain life, the one with which Dr. Harris measures the breadth and the depth of the whole process called education. Bishop Spalding,[1] too, strikes the same note over and over again, and sends us away uplifted with the divine harmonies echoing in our souls. Dr. Harris sets himself the hardest task of all, and his accomplishment is stated in highly organized and systematic form. To many of us his *Psychologic Foundations of Education* is doubly precious, for it gathers up the spoken words which have so often meant so much, and which we have sometimes feared might one day escape us. Here, set out in logical order, is the story of the mind's growth into the forms and the content of that human conquest which is civilization. It is difficult, no doubt, to follow the subtleties of the thought, but it is fascinating as well; and he who makes the thought his own has entered once for all the temple of philosophy.

Such, briefly described, are the volumes that make up the group which makes the year memorable. Nowhere in these books is there a note of pessimism or despair, nowhere is sounded the trumpet of revolution, nowhere is waved the red flag of anarchy. Neither human nature nor democratic institutions are given up for lost. All, on the contrary, are creative, hopeful; and all see a future full of promise. They have faith, and they impart it. I like to think that in this highly important aspect they represent the best thought and the most widespread popular instincts of our time. With such an exposition of education as is theirs, all can hardly be lost.

Turning now to the second topic, I would point out that it is not accidental, by any means, that in the great cities of this country there is deep interest in questions of school organization and administration. This interest, so marked during the past year, is a result, in part, of the newly roused municipal conscience which is reproaching us for inefficient, disorderly administration of a city's business, and in part of the growing importance, financial as well as other, of education as a public interest. The taxpayer's curiosity as to how his money is spent reinforces the school reformer's demand that it be spent solely for the wisest training of the city's children. So it happens that New York, Chicago, Philadelphia, Boston, St. Louis, Baltimore, Buffalo, San Francisco, Milwaukee, Detroit, and Toledo — to mention only the most conspicuous instances — have all made or are making history on this subject. It is important not to overlook the one point in which they are all in agreement, for it is not unusual to attempt to minimize the movement for city-school reform by calling attention to the wide variations of the detailed plans proposed for city-school organization. That one point of agreement is the demand

[1] *Thoughts and Theories of Life and Education.* Chicago: A. C. McClurg & Co., 1897. 236 pp. $1.

for efficiency. When a democracy earnestly demands efficiency in its servants, it has outgrown the swaddling-clothes of theory and is coming to years of discretion. It is plain to any careful observer that this demand for efficiency is now widespread in this country, and is by no means confined to the schools alone. It is heard in respect of the civil service, of the army, of governmental functions of all sorts. Why is there such widespread inefficiency in public-school administration? There is little or no actual dishonesty there; there is abundant earnestness; there is not a little skilled experience and special training. Only one answer is possible. The inefficiency is the result of the crystallization into system of traditions as to school government which are abreast neither of modern administrative machinery nor of the present condition of education itself. It is required nowadays that the machinery of education be simple, that power and discretion be definitely located, in order that responsibility may be promptly and justly fixed. It is required that legislative functions be sharply distinguished from executive, that matters needing professional knowledge and experience for their proper disposition be intrusted to professional hands, and that the pressure of party pull and private push be relieved in all possible ways by statutory provisions. The long but successful struggle to establish these conditions in New York, in the midst of great difficulties and against overwhelming odds, opened a new era. School reformers everywhere took courage, and there can be no question that the principles I have named will before long be established, no matter under what variety of detail, in every large city in the land.

During the year the storm-center of this disturbance has been over the city of Chicago. There the history of the New York movement is being repeated. A wholly admirable plan of reform has been outlined and formally proposed, and it has met with defeat at the hands of those who have most to gain from its adoption. It will be brought forward again, and perhaps again be defeated. It will be brought forward a third time, and then the fight will be won. When the modern, scientifically ordered system is in operation, those who are now resisting it so stoutly will marvel at the strength of the illusion which influenced them in so doing. In my judgment the report of the educational commission of the city of Chicago is the most exhaustive and the most authoritative contribution that has been made to the literature of city-school administration, and is the one quite indispensable book of reference on the subject. I regard its conclusions and recommendations as almost unassailable, whether viewed from the standpoint of theory or from that of practice. It is a model of painstaking study and of scientific method. That it bears, as the first signature attached to it, that of a member of this Council is a source of pride to us all.

In this movement for the improvement of the conditions attending

municipal school administration, it seems to me that two serious departures have been made from sound principles; and I am bold enough to predict that, unless corrected, their practical working will in time prove disastrous. One of these departures is that contained in the law governing the city of Milwaukee,[1] by the provisions of which the appointment of members of the school board is intrusted to a bi-partisan commission of four, who are in turn named by the mayor. This is, on its face, a device for devolving the power of designating members of the school board upon a semi-judicial body removed one stage from the heated controversies of party politics. In reality, however, it interposes an authority between the school board and the mayor, who alone can be held directly responsible by the voters for his school-board appointments; and, by attaching the bi-partisan principle to the constitution of the intermediate board, it suggests and rather emphasizes the fact that party politics should be considered in making school-board appointments. The Milwaukee law has other defects of detail, but this provision I believe to be a serious departure from sound principle, and one which should nowhere be imitated.

The second instance which I have in mind is contained in the new charter for San Francisco, soon to go into operation. Here we find two thoroly bad principles combined in one scheme: a bi-partisan school board and a paid school board, the members of which are required by law to give their entire time to the duties of their office. This is not only a departure from uniform American practice, but it is in flat contradiction to the principle which demands that the school board shall legislate only, and that all executive duties shall devolve upon professional officers. The city superintendent is to sit in the San Francisco school board, as in that of New York, without the right to vote, but his legitimate duties are apparently to be divided with the paid school board, so that either confusion and inefficiency or trading and practical "deals" may be expected to follow. There is no excuse for a paid school board in an American city. Such a board can only be given work enough to occupy it by stripping the superintendent, the supervisors, the principals, and the business officers of the school system of their just powers and responsibilities. The ideal member of a school board is the representative professional man or man of affairs, who understands and reflects public sentiment, who is accustomed to act promptly on matters of large concern and with a broad outlook, and who will bring to problems of school policy and to the consideration of the recommendations of the professional officers of the board a mature, well-balanced judgment and an unbiased care for the highest public interest. Such men will not serve for pay, nor will they — nor should they — give all their time to the business of the schools. The San Francisco innovation is, I feel sure, a bad one. It is

[1] *Statutes of Wisconsin*, 1897, chap. 186, sec. 2.

to be regretted, too, that the adoption of a new charter was not made the occasion for doing away with the custom of electing the superintendent of schools by the voters at a municipal election, a custom peculiar to San Francisco and to Buffalo, and one which of necessity introduces into the choice of a superintendent influences and considerations which should never have a place there.

Despite these important exceptions, however, the general movement for improved city-school administration has gone forward rapidly and in the right direction. The tendency to intrust professional duties to professional men and women, and to protect them from political or personal influence in their exercise, is uppermost. That hotbed of politics and jobbery, the local committee system, is being done away with. The principal is emerging as a school official whose powers should be increased and his influence recognized. The great body of the teaching force, always suspicious of change and usually opposed to it, is gradually coming to see that the new administrative scheme means for them increased freedom from deadening routine, from outside pressure and influence, and that it makes for the power, the dignity, and the professional upbuilding of the teacher himself. In all these respects the year has been distinctly one of progress.

Let me turn, now, to the events of the year in the three great culture-nations whose life and thought most nearly touch and affect our own. One cannot help being struck by the fact that the long-delayed awakening of England to her educational duty and her educational opportunity is an accomplished fact. To begin with, it is important to know that we have now an authoritative book to turn to for accurate information regarding the organization of the many and diverse educational agencies which exist in England, and which puzzle so sorely the American student. This is Mr. Graham Balfour's *Educational Systems of Great Britain and Ireland*,[1] published during the year. The English *Educational Review* has been revived, after a period of suspension, and two new journals of importance are trying their wings; these are *The School World*, devoted to secondary education, and *The Paidologist*—may it long survive its name!—having the study of children for its field, and gladly recognizing American influences in describing its origin and purpose.

I am most struck by the fact that the American college, as now constituted with its classical and its scientific courses side by side, is the type toward which there is a well-developed movement in England, an easily recognizable one in France, and a noticeable, tho as yet blind and unorganized, one in Germany. This is the meaning of the municipal colleges which are rapidly increasing in strength in England, and attracting to themselves new sources of support. Of these, Owens College, Manchester, is the best equipped, but University College, Liverpool,

[1] Oxford: Clarendon Press, 1898. 320 pp. 7s. 6d.

claims attention, particularly in America, because of its brilliant efforts to work out the problem of an academic organization in close relation to the needs of a great modern municipality. For example, it is at University College, Liverpool, that the first higher school of commerce has been established in Great Britain. It has many points of likeness with the collegiate course in commerce which is to be established in New York by Columbia University, thru the co-operation of the Chamber of Commerce. The new Midland University, to be established at Birmingham, largely thru the efforts of Mr. Chamberlain, has already received a generous gift from Mr. Andrew Carnegie, and is to devote much attention to applied science, and to commercial and technical subjects. Not much progress can be reported relative to the teaching university for London. The statutory commission is hard at work upon plans for it, and some sources of opposition to the scheme seem to be disappearing. The Reading College, whose rapid growth and excellent work have just led to its affiliation to Oxford University, is really a demonstration of the vitality of the university-extension movement in England, for it is in a sense the product of that movement.

Oxford and Cambridge are still institutions apart, with peculiar relations to the church and to the class from which England's rulers have mainly been drawn. How long they will retain their prestige is, however, a matter of conjecture, for democracy is sweeping all before it in England, and the two older universities have not smiled either upon it or upon the new educational movement. It is not impossible that there will be a rude awakening one day for Oxford and Cambridge. Meanwhile, they are sadly in need of funds, for the long period of agricultural depression has cut down their income very greatly. Just now, happily, Oxford has received some large donations for the scientific library (Radcliffe) and to establish the readership in psychology to which Mr. Stout, the editor of *Mind*, has been appointed. Cambridge has made a public appeal for funds, and the response is encouraging, owing in large measure to the influence of the Duke of Devonshire, chancellor of the university.

The movement to bring some order out of the chaos of secondary education, to fix standards, and to make provision for proper oversight, goes slowly but steadily on. As everyone knows, the problems having their origin in secondary education are those which have most engaged the attention of students of education in England for some time past. The time has now come when actual legislation seems near at hand. But the complications, social, economic, ethical, and religious, are very great, and extreme caution in framing a measure for enactment into law which will command unqualified support, is necessary. The country may be congratulated that at such a juncture the office of lord president of the council, to which falls the main parliamentary responsibility in the matter, is held by so judicious and so experienced a statesman as the Duke of

Devonshire. He has already indicated the steps which seem to him important. The first is to form a competent central authority, so organized as to be able to guide educational opinion without coercing it. This is what the pending board of education bill proposes. If established, this board of education will take the place of the existing central authorities for England and Wales. It is believed that the bill will become a law.

During the year a valuable mine of information has appeared in a parliamentary paper giving the results of an inquiry into the work and equipment of a selected list of secondary and of high-grade elementary schools, the purpose being to throw light upon the relations which exist, and those which should exist, between elementary and secondary education. Despite the many and perplexing aspects of the question, peculiar to English conditions, it is safe to predict that the more this matter is studied, the more clearly will it appear that there is no field or definite line between elementary and secondary education, but that the one fades gradually and insensibly into the other. It is apparent that what hides this fact from English view is the existence of certain economic and social distinctions which do not enter into the same problem as it exists in the United States.

The wisest observers are agreed that, as to elementary education, the outlook in England is anything but satisfactory. This is in large measure due to the fact that public opinion, when not wholly apathetic, is sorely divided as to a number of fundamental principles, which have long since established themselves securely in the United States. For this reason, perhaps, it is not infrequently said that an educational crisis is approaching in England, and Mr. Gladstone's prophecy that home politics for the next few years will center largely about education may be on the point of fulfillment. While it is true that large numbers of men and women in England are enthusiastic advocates of educational advance, yet it is also true that they have no formulated policy to urge, and that there are opposed to them not a few influential critics who doubt whether the work done in the elementary schools is in any true sense educational, and who believe that the nation cannot bear the crushing weight of the cost of making education universal and adequate. As a high authority writes in a personal letter: "Puzzlement, plus a crude idea of the essential importance of education, accompanied by a readiness to spend money in great masses rather than to devote some hard thinking to the problems at issue, may be taken as a rough diagnosis of the present state of English public opinion on elementary education."

As in the United States, so in England, the rural-school problem presents difficulties of its own. There the economic and taxing aspects of the question are quite as important as the purely educational. Nor do the resulting differences of opinion follow the usual party lines. Many

Liberals, especially in the northern counties, believe in the local school board, as constituted by the act of 1870, as the best authority to control education. Other Liberals would make the school board subordinate to the town council, and virtually a committee of it. Everyone agrees that there is need of an authority to supervise elementary education over large rural areas, with powers analogous to those lodged in our state superintendents of public instruction; but there are endless disputes as to what this authority shall be. All these cross-currents of opinion and this tangle of interests combine to block any sweeping or radical change. Nevertheless, it seems clear that the elementary-school teachers, especially in the cities and towns, are gaining in efficiency, and that their interest in education is broadening year by year. Despite this, however, there is no denying the fact that there is widespread suspicion that the intellectual results of the work of the elementary schools are far from being as satisfactory as was confidently predicted a few years ago. Should this suspicion pass over into a conviction, the developments of the immediate future will be intensely interesting and very instructive to Americans.

The instinct which led General Kitchener to propose the establishment of a Gordon memorial college at Khartoum, which brought to the proposal the prompt support of the public opinion of Great Britain, and which caused Kipling to celebrate it in virile verse, is in the highest degree noteworthy:

> For Allah created the English mad — the maddest of all mankind!
> They do not consider the Meaning of Things; they consult not creed or clan.
> Behold they clap the slave on the back, and behold he becometh a man!
> They terribly carpet the earth with dead, and before their cannon cool,
> They walk unarmed by twos and threes, to call the living to school.

The appearance of three stout volumes, abounding in matter of interest and importance, from the newly established Division of Special Inquiries and Reports in the Education Department, attests the wisdom of creating such a division, and of putting at its head as director so accomplished and efficient a man as Mr. Michael E. Sadler.

In France the reconstitution of the universities, accomplished in 1897, has removed them from the field of discussion, and questions of secondary education have come to the front with astonishing vigor. Publicists and men of affairs and of letters, as well as teachers, are participating in the very lively discussions which are now going on. These discussions center about the baccalaureate as established in 1808, the reform of which has been many times attempted. This degree is conferred by the university faculties as a result of examinations, conducted by them, upon the work done by the candidate in the secondary school. The importance of this diploma is very great; for it opens the way to most of the higher careers in France. What might have been expected has happened. The examinations for the baccalaureate have come to be an end, not a means; they

dominate the whole course of secondary instruction and hang over it like a pall. It is now asked that far-reaching reforms be instituted; that the secondary schools hold examinations of their own for graduation; that a proper certificate be conferred for the satisfactory completion of the secondary-school course; that this certificate admit the holder to the universities, where the baccalaureate shall be conferred by the faculties upon the completion of a specified period of study under their direction. M. Combes, now senator, formerly minister of public instruction, has introduced a carefully drawn measure to effect these changes. The analogy between this condition in France and some educational troubles of our own will not escape the attention of the Council.

Because of the importance of this subject the Chamber of Deputies has instituted a commission of thirty-three members to make an exhaustive inquiry into the whole subject and to submit a report upon it. This inquiry will cover no small part of the field examined in this country by the Committee of Ten on Secondary School Studies, appointed by the National Educational Association in 1892, and that on the Relations between the Secondary Schools and Colleges, appointed in 1895, and which is now ready to report. The president of the French commission is M. Ribot. Two former ministers of public instruction, M. Poincaré and M. Léon Bourgeois, have appeared before the commission to support the changes mentioned above as included in the proposed law of M. Combes, and to ask that the non-classical course in the secondary schools be recognized as fitting students to enter upon the study of law or of medicine, and also that a shorter, more practical, and less advanced course of secondary instruction be established side by side with the courses now existing. The mere mention of these suggestions is evidence that there is much in common between the aims and the methods of those who in France and in the United States are striving to broaden secondary education and to extend its influence. It is worth while to call attention to M. Bertrand's *L'Enseignement intégral*,[1] published during the year, which touches not a few of the topics in dispute, and advances constructive suggestions regarding them.

The year in Germany has not been eventful, tho a few happenings deserve passing mention. In the Prussian Parliament the minister of agriculture, von Hammerstein, raised a storm by his sharp attack on the elementary schools, in the course of which he charged that they were doing the agricultural interests of the country an injury by leading pupils away from agriculture toward the trades, business, and the professions. The minister of education, Bosse, replied with vigor, but without satisfying his colleague. More will be heard of the matter in the near future, and some important action may be taken in regard to it.

More important, by far, is the growing recognition in Germany of the

[1] Paris: F. Alcan, 1898. 313 pp. Fr. 7.50.

importance of the social aspects of education. Professor Natorp, of Marburg, in his *Sozial-Pädagogik*,[1] has made a very valuable contribution to the literature of this subject, and one which deserves attention in the United States. The insight which sees in education the inter-working of the individual and the influences which have shaped the social whole, and which therefore seeks light in the study of *Culturgeschichte*, receives strong support from Natorp, whose book may be safely singled out as the most striking German publication of the year on educational theory. In his *Herbart, Pestalozzi und die heutigen Aufgaben der Erziehungslehre*,[2] a book made up of lectures delivered at Marburg during the summer of 1898, Natorp has made another contribution of importance. It is in the form of the liveliest possible attack on Herbart's philosophy as the basis for an educational theory, and it has already roused Willmann, Flügel, Just, and Rein to vigorous replies. The controversy is of more than academic importance to American students of education, who have themselves recently passed thru a similar debate.

The drawing together of teachers whose work and interests, superficially viewed, lie far apart is much needed in Germany, and a promising beginning has lately been made in Greifswald, under the leadership of Professor Rehmke, of the university. The establishment of the *Zeitschrift für pädagogische Psychologie*, edited by Dr. Kemsies, of Berlin, marks the advance in Germany of a movement already well under way in the United States.

It seems, on the whole, apparent that the year has been one, not of change only, but of progress. The conviction of the importance of real education is stronger than ever before, and the efforts to attain it are more widespread and more earnest. That questions of educational organization and administration should be everywhere most prominent just now is significant of the importance of the demand for efficiency and effectiveness, as well as of the readjustment of the entire educational scheme to the present needs and capacities of the public. These matters are as important in their way as topics touching education on the more philosophical side are in theirs. The conception of education as a process based on the history of civilization, and making demands upon the whole power of the community as well as upon the entire capacity of the child, is not now seriously challenged. This conception of education alone stands the test both of experience and of philosophical scrutiny. It is the characteristic insight of the closing years of the nineteenth century. It remains for the twentieth to apply it in all its fullness.

[1] Stuttgart: Frommann's Verlag, 1898. 352 pp. M. 6.

[2] Stuttgart: Frommann's Verlag, 1899. —— pp. M. 3.

REPORT OF COMMITTEE ON RELATIONS OF PUBLIC LIBRARIES TO PUBLIC SCHOOLS

MAY 31, 1899.

To the Council of the National Educational Association.

GENTLEMEN: We have the honor to submit the following report:

It was impossible for your committee to begin active work until December 30, 1898. We have been unable, consequently, to make very full investigations. There have been sent out, however, by the members of the committee, several thousand circulars, letters of inquiry, and requests for aid. The results of this work are incorporated in the report, in part; in part they have appeared in an increased interest shown by educational and other journals, and by associations of teachers and librarians, during the past year, in the relations of schools and libraries.

J. C. DANA,
FRANK A. HUTCHINS,
CHARLES A. MCMURRY,
SHERMAN WILLIAMS,
M. LOUISE JONES,

Committee on Relations of Public Libraries to Public Schools.

PREFATORY NOTE

BY JAMES H. VAN SICKLE, SUPERINTENDENT OF THE NORTH SIDE SCHOOLS OF DENVER, AND VICE-PRESIDENT OF THE NATIONAL COUNCIL OF EDUCATION

[WRITTEN FOR THIS REPORT AT THE REQUEST OF THE COMMITTEE]

Since the National Educational Association adopted the policy of using a part of its income to investigate and report upon matters of importance in education, it has greatly increased its influence and its usefulness. The report of the Committee of Ten on Secondary Education, the report of the Committee of Fifteen on Correlation of Studies, Training of Teachers, and City School Systems, and the report of the Committee of Twelve on Rural Schools have been widely read and discussed. Educational practice the country over has been

largely influenced thereby; yet the service of these reports has but just begun.

If it is important to the development of the individual that he let his thought go over into action, how true also of an organization like the National Educational Association! Its annual meetings are delightful and inspiring; the volumes of proceedings form a cyclopædia of education of untold value; the papers and discussions, while in the main expressing individual opinion, yet show the general trend of public sentiment as it changes and advances from year to year. But valuable as are the addresses and discussions, the carefully prepared reports of the few special committees thus far authorized by the association have been of far greater service in unifying school work. The more careful investigation made possible by adequate financial support insures conclusions which are likely to be accepted as reliable. In this way more than in any other is the National Educational Association becoming a reforming agent of gigantic power. The new rule requiring the approval of the National Council of all investigations carrying appropriation, and placing such investigations under the auspices of the Council, insures a careful weighing of values, and is a needed and sufficient check upon unwisse or needles expenditures.

No investigation yet undertaken promises greater returns than the one embodied in this report upon the relation of public libraries to public schools. The past few years have witnessed a remarkable movement, confined to no one part of the United States, looking toward organizing and directing the reading of children; yet the general and departmental programs of the National Educational Association gave no indications previous to 1897 that the association recognized its opportunity to direct the movement. In 1896, in response to a circular letter prepared by Mr. J. C. Dana, then librarian of the Denver Public Library and president of the American Library Association, a petition to the Board of Directors of the National Educational Association was numerously signed, resulting in the creation of a Library Department, with Hon. Melvil Dewey, of New York, as president. Librarians and teachers worked together in the department from the first with a few definite purposes, among which were the following: to find out what had been done by teachers toward the direction and study of the reading of children; to find out what librarians had done to encourage and assist teachers in this work; to bring teachers and librarians into more mutually helpful relations; to determine the best books for various purposes and their adaptability to children of different ages. The following quotation from the remarks of Mr. Melvil Dewey before the Board of Directors at Buffalo gives very clearly the aim of the department:

> By law the children are put under your influence in their earlier years, when, if ever, they can be taught to love good books so well that in all their lives thereafter they will

seize on every opportunity to read them. If the librarians, with their wing of the educational army, can select and catalog and provide free of cost the best on every subject, the schoolmen, with their wing and with their immensely larger resources both of money and men — and still better, of devoted women — must send out from the schools, year by year, boys and girls who will be lifelong patrons of the public library, and will, in due time, help to send their own children along the paths which have proved for them so profitable and pleasant.

. . . . but its great work should be the partial recognition that education is no longer for youth and for a limited course, in a school to which they give most of their time, but that it is really a matter for adults as well as youth, for life, and not for the course, to be carried on at home as well as in the schools, and to be taken up in the hours or minutes of leisure, as the proper accompaniment of their regular business or labor. This means that education must be carried on by means of reading, and that, if the librarians are to furnish the books and give all necessary help in their proper field, the schools must furnish the readers.

At the Milwaukee meeting, 1897, two committees were appointed—one, with F. A. Hutchins, of Wisconsin, as chairman, to prepare and recommend lists of books and editions suited for the reading and reference use of pupils in the several grades of the public schools; and the other, with J. C. Dana as chairman, to report on the relations of public libraries to public schools, indicating methods of co-operation by which the usefulness of both may be increased. At the Washington meeting, 1898, these two committees reported. (See *Proceedings of the National Educational Association*, 1898, pp. 1014–28.)

On the recommendation of the Committee on Reading Lists and Editions, the department decided to create a committee of five members instead of two, as before, the new committee, called the Committee on Relation of Public Libraries to Public Schools, to be charged with the duties of the two former committees. An appropriation of $500 having been made by the Board of Directors for carrying on the work, the members of this committee were appointed by the National Council of Education.

It seems to be true that the greatest amount of reading is done by children between the ages of twelve and fourteen, and that by the end of the high-school course pupils settle down to one class of reading matter, whatever that may be. (*Proceedings of the National Educational Association*, 1897, p. 1019.) The importance of deciding what books are suited to children at this period, and of placing such books within their reach, will be readily conceded. Children will read what they like. If we can find out what they like and then provide it for them from literature true to life, now accessible, we may be reasonably certain that the class of reading settled down to later will never drop below the level of the taste thus formed.

But to begin our selection for the child at the age of twelve is too late for best results. We must begin as soon as he learns to read, or even before, if possible, by reading to him and by story-telling. Not the least

of the difficulties is the selection of a few appropriate books from the vast number available. In this matter the report will be found to be of great service. It covers the entire field of home and school reading. In the city the problem is comparatively easy, provided teachers are alive to their opportunities. Here much has been done. In the country and in the small village the problem is more difficult. This report gives valuable experience to aid the teacher in this great work, wherever his lot may be.

I. PUBLIC LIBRARIES AND PUBLIC SCHOOLS

The education gained at school must, with the great majority of people, be meager at the best. This may be, and should be, supplemented by extensive reading after the school life is finished. If this work is to be done well, and under favorable conditions, the pupil must, while in school, not only be trained to like good literature, but also, if possible, to use a public library intelligently. This demands cordial relations and intelligent co-operation between school and library authorities, between teachers and librarians.

The library must be regarded as an important and necessary part of the system of public education. It is said that not more than one in five hundred of the inhabitants of Massachusetts are without library facilities. This should be the condition everywhere, and may be at no very distant time if those who should be most interested — the teachers of the country — will make a unanimous, persistent, and continued effort in this direction. There is nothing that appeals to people more generally, or to which they will respond more readily and liberally, than an effort to establish free public libraries, if the work is carried on with good judgment.

The teachers of a town should know the public library, what it contains, and what use the pupils can make of it. The librarian must know the school, its work, its needs, and what he can do to meet them. He must be able to supplement and broaden the work of the teacher of geography, science, history, or literature. He should meet the teachers from time to time and become generally familiar with their work, and they should meet with him and become familiar with the library, what it contains, and its methods.

The librarian should make frequent bulletins for school use. He should make lists for collateral reading in history, not merely works on history, but biography, historical fiction, and poems treating of historical events.

The librarian should meet with the pupils occasionally and talk to them upon such matters pertaining to their reading as seems wise. They should have free access to the library shelves. The librarian should issue such special bulletins as may be wise—bulletins giving the books treating of local matters, if there be such; matters of present interest; for example, last winter a special bulletin giving a list of books treating of Hawaii, Cuba, the Philippines, and the far East would have been of much value.

Children must be directed and trained in regard to their reading. They can no more be trusted to get their own knowledge of and taste for literature, unaided, than they can get their scientific and mathematical training in the same way.

If it is the duty of the state to see that its citizens know how to read, it is certainly no less its duty to see that they are trained to do the right kind of reading; otherwise the ability to read may be harmful rather than beneficial, both to the individual and to the state.

Not every place can maintain a public library. Some people must be deprived of the library facilities that many places have. But every state can, without great expense, maintain a system of traveling libraries that may reach every community in which there is anyone sufficiently interested to give proper attention to the matter. Some states, notably New York and Wisconsin, have undertaken the work, and anyone interested, by writing to Secretary Melvil Dewey, Albany, N. Y., or Mr. Frank Hutchins, Madison, Wis., can learn in regard to the details of the work in those states.

Librarians usually know books much better than teachers do, but children not nearly so well; therefore active co-operation is necessary to the accomplishment of the best results.

Pupils should, while in school, be trained to know and love good literature, to use reference-books, to economize time in reading, thru the use of tables of contents, page-headings, etc.

Training pupils to read and love good literature is by far the most important work done in school. There is nothing else that a teacher can do at all comparable to it in value. It is the one thing the school does that continues to contribute to one's education so long as he lives. We should never forget that it is not the ability to read, but the use made of that ability, that contributes to the destiny of a child.

Someone has said that education consists in formation of habits and the acquisition of tastes. This is certainly the case so far as reading is concerned, and all that the school and library can do, working together in harmony, is necessary to the best success in this matter of forming correct reading habits and good taste in literature.

SHERMAN WILLIAMS.

II. READING LISTS

In the preparation of the following lists certain things were kept in mind that should be considered by those who are interested in the work.

It was not thought wise to include any series of school readers. Each community will settle that matter for itself, and any attempt at discrimination, on part of this committee, would not be productive of good results.

The lists are merely suggestive. It is not expected that anyone will be likely to use them without change. They furnish a plan, a basis for work, and are to be modified to meet local conditions. There are many books which, while possessing general interest, have a special interest in certain localities. Frederic's *In the Valley* would have a special interest in the state of New York. Parker's *Seats of the Mighty*, Kirby's *Golden Dog*, Parkman's *Montcalm and Wolfe* and *Conspiracy of Pontiac*, Hawthorne's *Twice Told Tales*, Earle's *Social Life in Old New England*, Underwood's *Quabbin*, Bynner's *The Begum's Daughter*, and the novels of Miss Austin would be of greater interest in New York and New England than in other parts of the country. Page's *In Ole Virginia*, Cooke's *My Lady Pokahontas*, Goodwin's *Head of a Hundred* and *White Aprons* are of special interest in Virginia. Lummis' *Spanish Pioneers* will be of greater interest in parts of the Southwest than elsewhere. Miss Catherwood's historical novels will be of greater interest in states bordering on Canada. The story of Joliet, La Salle, Marquette, Hennepin, and others will be of greater interest in the upper Mississippi valley. The writings of Boyesen will greatly interest those portions of our country settled by Scandinavians. So the teachers of each section of country must select, in part, those books of local interest. It is not possible that any general list will meet local conditions.

The lists are not intended to be closely graded. The pupils in the same grade differ so greatly in literary ability, taste, and development that the books selected for any grade should have a corresponding difference.

The lists will certainly be criticised, both for what they contain and for what they omit. No list could be made that would not be open to both these criticisms. The critics must modify the lists to meet their tastes and needs. One must always consider both himself and his environment in the work of teaching.

The list for pupils in Grades 1 to 12 provides for reading by the class, reading to the class by the teacher, and memorizing of certain

selections in the first eight grades. While no list for home reading has been made, it is believed that the teacher should, so far as possible, direct a portion of the out-of-school reading of the pupils. There are more books named in each grade than can possibly be read in school, and it will be well to see that some of them are read at home. Provision for having certain selections memorized is made, because it is believed that good reading will not be general in schools in which declamation is not practiced.

The teacher should have at least three things in mind in reading to the class. With the youngest pupils the chief purpose should be to arouse an interest in good reading; with those who are old enough to read for themselves it is well to read a portion of books that the children should read, and then let them get the books and finish them for themselves if they care to do so; with the oldest pupils it is well to read some books that the pupils would hardly comprehend if they read them for themselves, yet not so far beyond their comprehension but that, when read by the teacher, and commented upon occasionally, the meaning would be clear, and the thought of interest.

It is not expected that the class will read all the books mentioned in any grade, or that the teacher will read to the class all named for that purpose, but that selections will be made; nor that all books will be read in full.

In the additional lists for grammar grades it is understood that the books named are merely additional books for Grades 5, 6, 7, and 8, for the benefit of those schools that can have access to larger libraries. These additional books are intended chiefly for home reading, and are not classified as books to be read in class or by the teacher, tho some of them may well be used for these purposes.

It is understood that in very many places there will be great difficulty in getting the books needed, and that it will be impossible at present in many schools; but if sufficient interest be aroused in the matter, that difficulty will be met and settled. The first thing is to lead teachers everywhere to feel the importance of this work.

It is thought best to make the list of reference-books comparatively short, and to place first those of most importance, and which most schools in cities and towns will be able to get. In the main, the less expensive books are named first, so that those first on the list will be available to the larger number of schools. There is no limit to reference-books that may be used to advantage, save the limit of means to purchase them.

Whenever the cost of a book is given, it is the list price, from which a considerable discount may be had.

It is an excellent plan to keep a record of the reading of the children. This can be best done by having a little book made for each pupil. A

book about 4½ by 6 inches, with twenty-four pages, having a heavy board cover, can be had for about 3 cents. Two of the pages should be ruled for keeping a record of the periodical reading, the remainder for a record of the books read. The book should have on the front cover the name of the pupil. On the first two pages should be written the names of all the periodicals of all kinds that the pupil regularly reads. There should be entered in the first of two columns at the right the year in which he began to read them regularly. In the second column should be written the year in which he ceases to read them. This record, then, will show the periodicals read by the pupil, and the number of years he read them. The remainder of the book should contain a record of the books read, giving author and title. The books should be passed out about once a month for the pupils to make entries. The books should be kept by the teacher, and passed on to the next teacher when the pupil is promoted, not becoming the property of the pupil till he leaves school. No criticism should be made regarding the character of the books reported, unless it be a favorable one. Otherwise a correct report is not likely to be made. The keeping of the record will of itself largely control the child's reading. He will read books that he would not otherwise do, because he does not wish to have it known that he is ignorant of that which is generally known by his associates.

These records are of much value in the work of the school. For example, a teacher is to have a new class in American history next month; she sends for the reading record of the class, and looks over the little books. She makes lists of those who have read much regarding American history, those who have read little, and those who have read nothing. In this way she knows more of the reading of the class, its knowledge and its tastes, and what she can expect to accomplish, and how to do it, than she would be able to learn in many weeks without this record.

It is well occasionally to have some book read with unusual care. This may be done by making it a basis for rhetorical work. For example, let the book to be read be assigned two months in advance, a part of the class be given topics to write, and others given recitations from the book illustrating certain features. Everyone will read the book with care. When the day for the rhetorical exercises comes, there will be an interest in the book and a knowledge of it that can be brought about in no other way. Of course, every book is not well adapted for such treatment. *Uncle Tom's Cabin*, *Robinson Crusoe*, *Tom Brown at Rugby*, *Evangeline*, *Snow Bound*, and many others will readily suggest themselves. When one book is treated in this way, the pupils trained in the work wil ever after be able to read any other book of similar character and get more out of it than they otherwise could have done. Reading must be made something more than merely calling words. Pupils must be trained

to see ideas back of the words. They must see the sights described, hear the sounds spoken of, get the author's thought.

SHERMAN WILLIAMS.

List of books to be read in Grades 1 to 12, inclusive, with special reference to the average country school and the average grade teacher.

GRADES, ONE AND TWO

TO BE READ IN THE CLASS

Beckwith:	*In Mythland.*	D. C. Heath & Co.	$0.25
Swinton:	*Easy Steps for Little Feet.*	American Book Co.	0.25
Pratt:	*Legends of the Red Children.*	Werner Co.	0.30
Scudder:	*Fables and Folk Lore.*	Houghton, Mifflin & Co.	0.40
Wright:	*Seaside and Wayside*, No. 1.	D. C. Heath & Co.	0.25

TO BE READ BY THE TEACHER TO THE CLASS

Andrews:	*Each and All.*	Ginn & Co.	$0.50
Andrews:	*Seven Little Sisters.*	Ginn & Co.	0.50
Andersen:	*Fairy Tales.* Many editions.	Cost not over	0.40
Scudder:	*Fables and Folk Stories.*	Houghton, Mifflin & Co.	0.40
Eggleston:	*Stories of Great Americans.*	American Book Co.	0.40
McMurry:	*Classic Stories for Little Ones.*	Public School Pub. Co.	0.35
Judd:	*Classic Myths.*	School Education Co.	0.40
Burt:	*Nature Studies*, from Burroughs.	Ginn & Co.	0.25
Baldwin:	*Fifty Famous Stories Retold.*	American Book Co.	0.35
Kirby:	*Aunt Martha's Corner Cupboard.*	Nelson & Sons.	0.60
Muloch:	*Adventures of a Brownie.*	Crowell & Co.	0.80
Wiggin:	*Bird's Christmas Carol.*	Houghton, Mifflin & Co.	0.40
Wiggin:	*Story of Patsy.*	Houghton, Mifflin & Co.	0.48

SELECTIONS TO BE MEMORIZED

"Baby Bye"	Theodore Tilton
"A Visit from St. Nicholas"	Clement C. Moore
"Sweet and Low"	Alfred Tennyson
"Dutch Lullaby"	Eugene Field
"Obedience"	Phœbe Cary
"The Brown Thrush"	Lucy Larcom
"Twinkle, Twinkle, Little Star"	Jane Taylor
"Seven Times One"	Jean Ingelow
"Little Boy Blue"	Eugene Field
"Suppose"	Phœbe Cary
"Marjorie's Almanac"	T. B. Aldrich
"Little by Little"	Luella Clark
"The Dream Peddlar"	Lucy Blinn
"Do All that You Can"	M. E. Sangster
"Nobility"	Alice Cary
"The Vicar's Sermon"	Charles Mackay
"America"	Samuel F. Smith

GRADES, THREE AND FOUR

TO BE READ IN THE CLASS

Andersen:	*Fairy Tales.* Many editions.	Cost not over	$0.40
Ruskin:	*King of the Golden River.* Several editions.	Cost not over	0.25
Eggleston:	*Stories of Great Americans.*	American Book Co.	0.40
Sewell:	*Black Beauty.*	Weeks & Co.	0.25
Kingsley:	*Water Babies.*	Ginn & Co.	0.50
Defoe:	*Robinson Crusoe.* Many editions.	Cost not over	0.25
Æsop:	*Fables.* Many editions.	Cost not over	0.25
Hawthorne:	*Wonder Book.*	Houghton, Mifflin & Co.	0.35
Wyss:	*Swiss Family Robinson.* Many editions.	Cost not over	0.40
Saunders:	*Beautiful Joe.*	American Baptist.	0.30

TO BE READ BY THE TEACHER TO THE CLASS

Longfellow:	*Paul Revere's Ride*, and other short poems.		
Whittier:	From *Snow Bound*, *The Barefoot Boy*, and *Barbara Frietchie.*		
Biographies of Washington, Franklin, Lincoln, and other great Americans.			
Dickens:	*Christmas Carol.* Many editions.	Cost from	$0.12 to 0.25
American history, Stories from.			
Andrews:	*Ten Boys.*	Ginn & Co.	0.50
Grimm:	*Fairy Tales.* Many editions.	Cost not over	0.40
Kipling:	*Jungle Book.*	Century Co.	1.50

SELECTIONS TO BE MEMORIZED

"The Barefoot Boy"	John G. Whittier
"The Children"	Henry W. Longfellow
"Lullaby"	Alfred Tennyson
"Snow Bound," first ninety-two lines	John G. Whittier
"Old Ironsides"	Oliver Wendell Holmes
"The Sand Piper"	Celia Thaxter
"Robert of Lincoln"	William Cullen Bryant
"Paul Revere's Ride"	Henry W. Longfellow

GRADES, FIVE AND SIX

TO BE READ IN THE CLASS

Burroughs:	*Birds and Bees*, *Sharp Eyes*, and other papers.	Houghton, Mifflin & Co.	$0.40
Longfellow:	*Hiawatha.*	Houghton, Mifflin & Co.	0.40
Andrews:	*Ten Boys.*	Ginn & Co.	0.50
Defoe:	*Robinson Crusoe.* Many editions.	Cost not over	0.25
Hawthorne:	*Tanglewood Tales.*	Houghton, Mifflin & Co.	0.40
Longfellow:	*Miles Standish.*	Houghton, Mifflin & Co.	0.40
Longfellow:	*Children's Hour*, and other selections.	Houghton, Mifflin & Co.	0.40
Whittier:	*Snow Bound*, *Among the Hills*, etc.	Houghton, Mifflin & Co.	0.40

Warner:	*A Hunting of the Deer*, and other papers.	Houghton, Mifflin & Co.	$0.25
Irving:	*Rip Van Winkle.* Many editions.	Cost not over	0.25

TO BE READ BY THE TEACHER TO THE CLASS

Craddock:	*Down the Ravine.*	Houghton, Mifflin & Co.	$1.00
Franklin:	*Autobiography.*	Ginn & Co.	0.40
Gilman:	*Magna Charta Stories.*	Lothrop Publishing Co.	0.75
Tennyson:	*Enoch Arden.* Many editions.	Cost not over	0.25
Irving:	*Legend of Sleepy Hollow.* Many editions.	Cost not over	0.25
Warner:	*Being a Boy.*	Houghton, Mifflin & Co.	0.60
Alcott:	*Little Women.*	Roberts Bros.	1.50
Bolton:	*Girls who have Become Famous.*	Crowell.	1.50
Bolton:	*Poor Boys who Became Famous.*	Crowell.	1.50
Howells:	*A Boy's Town.*	Harper & Brothers.	1.25
Brown:	*Rab and his Friends.*	Houghton, Mifflin & Co.	0.40
Aldrich:	*Story of a Bad Boy.*	Houghton, Mifflin & Co.	0.70
Sidney:	*Five Little Peppers.*	Lothrop Publishing Co.	1.50

SELECTIONS TO BE MEMORIZED

"The Chambered Nautilus"	Oliver Wendell Holmes
"Over and Over Again"	Josephine Pollard
"The Crow's Children"	Alice Cary
"Old Ironsides"	Oliver Wendell Holmes
"The Good Time Coming"	Charles Mackay
"The Blue and the Gray"	Francis Miles Finch
"The Brook"	Alfred Tennyson
"Whittling"	John Pierpont
"What Might be Done"	Charles Mackay
"Battle Hymn of the Republic"	Julia Ward Howe

GRADES, SEVEN AND EIGHT

TO BE READ IN THE CLASS

Hale:	*A Man Without a Country.*	Little, Brown & Co.	$0.50
Longfellow:	*Evangeline.*	Houghton, Mifflin & Co.	0.25
Eliot:	*Silas Marner.* Many editions.	Cost not more than	0.30
Whittier:	*Snow Bound.*	Houghton, Mifflin & Co.	0.25
Lowell:	*Vision of Sir Launfal.*	Houghton, Mifflin & Co.	0.25
Longfellow:	*Miles Standish.*	Houghton, Mifflin & Co.	0.25
Hughes:	*Tom Brown at Rugby.*	Houghton, Mifflin & Co.	0.50

TO BE READ BY THE TEACHER TO THE CLASS

Yonge:	*Book of Golden Deeds.*	The Macmillan Co.	$0.50
Ball:	*Star Land.*	Ginn & Co.	1.00
Geikie:	*Physical Geography Primer.*	D. Appleton & Co.	0.35
Scott:	*Ivanhoe.* Many editions.	Cost not over	0.40
Macaulay:	*Lays of Ancient Rome.* Many editions.	Cost not over	0.25
Scott:	*Lady of the Lake.* Many editions.	Cost not over	0.40
Towle:	*Pizarro.*	Lee & Shepard.	1.00

SELECTIONS TO BE MEMORIZED

"Song of Marion's Men"	William Cullen Bryant
"The Landing of the Pilgrims"	Mrs. Hemans
"The Ship of State"	Henry W. Longfellow
"The Centennial Hymn"	John G. Whittier
"Abou Ben Adhem"	Leigh Hunt
"The Manliest Man"	George W. Bungay
"The Way to Heaven"	J. G. Holland
"Love of Country"	Walter Scott
"Daily Work"	Charles Mackay
"The American Flag"	Joseph Rodman Drake
"Gettysburg Address"	Abraham Lincoln
"My Country"	James Montgomery
"The Concord Hymn"	Ralph Waldo Emerson
"Marmion and Douglas"	Walter Scott

GRADES, NINE AND TEN

TO BE READ IN THE CLASS

Scott:	*Ivanhoe.* Many editions.	Cost not over	$0.40
Scott:	*Lady of the Lake.* Many editions.	Cost not over	0.40
Scott:	*Marmion.* Many editions.	Cost not over	0.40
Shakespeare:	*Julius Cæsar.* Many editions.	Cost not over	0.25
Shakespeare:	*Merchant of Venice.* Many editions.	Cost not over	0.25
Cooper:	*The Last of the Mohicans.* Many editions.	Cost not over	0.40

TO BE READ BY THE TEACHER TO THE CLASS

Ouida:	*Bimbi.*	Lippincott Co.	$0.75
Macé:	*History of a Mouthful of Bread.*	Harper & Brothers.	1.00
Warner:	*Back Log Studies.*	Houghton, Mifflin & Co.	1.00
Warner:	*My Summer in a Garden.*	Houghton, Mifflin & Co.	1.00
Goldsmith:	*Deserted Village.* Many editions.	Cost not over	0.25
Byron:	*Prisoner of Chillon.* Many editions.	Cost not over	0.25
Gray:	*Elegy Written in a Country Churchyard.*	Cost not over	0.15

GRADES, ELEVEN AND TWELVE

TO BE READ IN THE CLASS

Webster:	*First Bunker Hill Oration.* Many editions.	Cost not over	$0.15
Coleridge:	*Rime of the Ancient Mariner.* Many editions.	Cost not over	0.15
Bryant:	*Thanatopsis.* Many editions.	Cost not over	0.15
Macaulay:	*Lays of Ancient Rome.* Many editions.	Cost not over	0.35

TO BE READ BY THE TEACHER TO THE CLASS

Emerson:	*Essay on Compensation.* Many editions.	Cost not over	$0.25
De Quincey:	*Flight of a Tartar Tribe.* Many editions.	Cost not over	0.25
Ruskin:	*Ethics of the Dust.* Many editions.	Cost not over	0.25
Shelley:	*Ode to a Skylark.* Many editions.	Cost not over	0.15
Holmes:	*Autocrat of the Breakfast Table.*	Houghton, Mifflin & Co.	0.60

THE USE OF BOOKS AND LIBRARIES IN GRAMMAR GRADES

FIRST GRAMMAR GRADE

Black:	*The Four MacNicols.*	Harper & Brothers.	$1.00
Baylor:	*Juan and Juanita.*	Houghton, Mifflin & Co.	1.50
Boyesen:	*Against Heavy Odds.*	Chas. Scribner's Sons.	1.25
Clemens:	*Prince and Pauper.*	American Publishing Co.	1.00
Ewing:	*Jackanapes.*	Roberts Bros.	0.50
Taylor:	*Boys of Other Countries.*	Putnam's Sons.	1.25
Stockton:	*Stories of New Jersey.*	American Book Co.	0.60
Vincent:	*The Plant World.*	D. Appleton & Co.	0.60
Weed:	*The Insect World*	D. Appleton & Co.	0.60
Towle:	*Rlaegh.*	Lee & Shepard.	0.60
Wiggin:	*The Story of Patsy.*	Houghton, Mifflin & Co.	0.60

SECOND GRAMMAR GRADE

Stowe:	*Uncle Tom's Cabin.* Many editions.	Cost not over	$0.50
Richards:	*Captain January.*	Estes & Lauriat.	0.35
Burnett:	*Little Lord Fauntleroy.*	Chas. Scribner's Sons.	1.25
Dodge:	*Hans Brinker.*	Chas. Scribner's Sons.	1.50
Ouida:	*The Dog of Flanders.*	Lippincott.	1.00
Alcott:	*An Old-Fashioned Girl.*	Roberts Bros.	1.50
Bunyan:	*Pilgrim's Progress.* Many editions.	Cost not over	0.50
Dickens:	*Christmas Stories.*	A. L. Burt.	0.75
Butterworth:	*Zig-Zag Journeys.*	Estes & Lauriat.	1.50
Verne:	*Around the World in Eighty Days.*	Coates & Co.	0.50
DuChaillu:	*Under the Equator.*	Harper & Brothers.	1.00
Scudder:	*Bodley Books.*	Houghton, Mifflin & Co.	2.00
Bolton:	*Famous Leaders among Men.*	Crowell & Co.	1.50
Scudder:	*George Washington.*	Houghton, Mifflin & Co.	0.40
Towle:	*Magellan.*	Lee & Shepard.	0.60
Towle:	*Sir Francis Drake.*	Lee & Shepard.	0.60
Towle:	*Vasco de Gama.*	Lee & Shepard.	0.60
Brooks:	*Historic Boys.*	Putnam's Sons.	1.50
Brooks:	*Historic Girls.*	Putnam's Sons.	1.50
Eggleston:	*Strange Stories from History.*	Harper & Brothers.	1.00
Drake:	*Indian History for Young Folks.*	Harper & Brothers.	3.00
McMurry:	*Pioneer History Stories of the Mississippi Valley.*	Public School Pub. Co.	0.50
Watson:	*Boston Tea Party.*	Lee & Shepard.	0.50
Wright:	*Children's Stories of American History.*	Chas. Scribner's Sons.	1.25
Wright:	*Children's Stories of American Progress.*	Chas. Scribner's Sons.	1.25
Guerber:	*The Story of the Greeks.*	American Book Co.	0.60
Guerber:	*The Story of the Romans.*	American Book Co.	0.60
Baskett:	*The Story of the Birds.*	D. Appleton & Co.	0.65
Geikie:	*Geology Primer.*	D. Appleton & Co.	0.35
Ker:	*From the Hudson to the Neva.*	Lothrop Publishing Co.	1.25
Carpenter:	*Geography Reader on Asia.*	American Book Co.	0.60
Fiske:	*War of Independence.*	Houghton, Mifflin & Co.	0.40

THIRD GRAMMAR GRADE

Austin:	*Standish of Standish.*	Houghton, Mifflin & Co.	$1.25
Cooper:	*The Spy.* Many editions.	Cost not over	0.50
Page:	*Two Little Confederates.*	Chas. Scribner's Sons.	1.50
Wiggin:	*Polly Oliver's Problem.*	Houghton, Mifflin & Co.	1.00
Martineau:	*Peasant and Prince.*	Ginn & Co.	0.50
Seawell:	*Decatur and Somers.*	D. Appleton & Co.	1.00
Yonge:	*Book of Golden Deeds.*	The Macmillan Co.	0.50
Stevenson:	*Treasure Island.* Many editions.	Cost not over	0.75
Scott:	*Quentin Durward.* Many editions.	Cost not over	0.50
Longfellow:	*Evangeline, Courtship of Miles Standish*, and favorite shorter poems.	Houghton, Mifflin & Co.	0.40
Whittier:	*Snow Bound, Tent on the Beach*, and favorite shorter poems.	Houghton, Mifflin & Co.	0.40
Abbott:	*Darius the Great, Hannibal, Cæsar, Romulus, William the Conqueror, Empress Josephine, Queen Elizabeth, Madame Roland.*	Harper & Brothers. Each	1.00
Towle:	*Heroes and Martyrs of Invention.*	Lee and Shepard.	1.00
Kingsley:	*Greek Heroes.*	Ginn & Co.	0.50
Butterworth:	*Boyhood of Lincoln.*	D. Appleton & Co.	1.50
Macaulay:	*Warren Hastings.* Many editions.	Cost not over	0.50
Abbott:	*La Salle, Boone, Franklin, De Soto, Cortes, Paul Jones, Peter Stuyvesant.*	Harper & Brothers. Each	1.00
Carroll:	*Twelve Americans.*	Harper & Brothers.	1.75
Hale:	*Stories of Invention.*	Roberts Bros.	1.00
Parton:	*Captains of Industry.* 2 vols.	Houghton, Mifflin & Co.	0.60
Montgomery:	*Heroic Ballads*	Ginn & Co.	0.40
Alton:	*Among the Law Makers.*	Chas. Scribner's Sons.	1.50
Proctor:	*The Expanse of Heaven.*	Longmans, Green & Co.	1.25

FOURTH GRAMMAR GRADE

Wallace:	*Ben Hur.*	Harper & Brothers.	$1.50
Blackmore:	*Lorna Doone.*	Harper & Brothers.	1.00
Holland:	*Arthur Bonnicastle.*	Chas. Scribner's Sons.	1.25
Cooper:	*The Pilot.* Many editions.	Cost not over	0.50
Jackson:	*Ramona.*	Roberts Bros.	1.50
Stevenson:	*Black Arrow.*	Roberts Bros.	1.25
Scott:	*Kenilworth.* Many editions.	Cost not over	0.50
Scott:	*The Talisman.* Many editions.	Cost not over	0.50
Irving:	*The Alhambra.* Many editions.	Cost not over	0.50
Dickens:	*David Copperfield.* Many editions.	Cost not over	0.50
Kingsley:	*Westward Ho!*	Crowell & Co.	0.50
Larcom:	*A New England Girlhood.*	Houghton, Mifflin & Co.	0.75
Cooke:	*Stories of the Old Dominion.*	Harper & Brothers.	1.50
Saintine:	*Picciola.*	A. L. Burt.	1.00
Hale:	*A New England Boyhood.*	Cassell & Co.	1.00
Frederic:	*In the Valley.*	Chas. Scribner's Sons.	1.50

REFERENCE-BOOKS

Webster's International Dictionary.	G. & C. Merriam Co.	$10.00
Chamber's Encyclopædia. Last edition.	Lippincott Co.	30.00

Rand, McNally:	*Indexed Atlas of the World.*		$18.50
Bartlett:	*Familiar Quotations.*	Little, Brown & Co.	3.00
Hoyt and Ward:	*Cyclopædia of Quotations.*	Funk & Wagnalls Co.	5.00
Champlin:	*Young Folks' Cyclopædia of Common Things.*	Henry Holt & Co.	2.50
Champlin:	*Young Folks' Cyclopædia of Persons and Places.*	Henry Holt & Co.	2.50
Gaye:	*The World's Great Farm.*	The Macmillan Co.	1.50
Haydn:	*Dictionary of Dates.*	Putnam's Sons.	6.00
Wheeler:	*Familiar Allusions.*	Houghton, Mifflin & Co.	2.00
Wheeler:	*Who Wrote It?*	Lee & Shepard.	2.00
Soule:	*Synonyms.*	Lippincott Co.	2.25
Gayley:	*Classic Myths.*	Ginn & Co.	1.50
Bulfinch:	*Age of Fable.*	Lee & Shepard.	2.50
Lippincott's Gazetteer.			12.00
Baldwin:	*The Book Lover.*	A. C. McClurg & Co.	1.00
Crabb:	*English Synonyms.*	Harper & Brothers.	1.25
Peck:	*Dictionary of Classical Literature.*	Harper & Brothers.	8.00
Bent:	*Familiar Short Sayings of Great Men.*	Houghton, Mifflin & Co.	2.00
Matson:	*References for Literary Workers.*	A. C. McClurg & Co.	2.50
Brewer:	*Reader's Handbook.*	Lippincott Co.	3.50
Brewer:	*Historic Note-Book.*	Lippincott Co.	3.50
Brewer:	*Dictionary of Phrase and Fable.*	Lippincott Co.	3.50
Edwards:	*Words, Facts and Phrases.*	Lippincott Co.	2.50
Lossing:	*Cyclopædia of United States History.*	Harper & Brothers.	10.90
Lalor:	*Cyclopædia of Political Science, Political Economy, and Political History.*	Rand, McNally & Co.	
Larned:	*History for Ready Reference.* 5 vols.	Nichols.	25.00
Johnson's Cyclopædia. 8 vols.		D. Appleton & Co.	48.00
Appleton's American Biography. 6 vols.		D. Appleton & Co.	30.00
International Cyclopædia. 15 vols.		Dodd, Mead & Co.	56.00

III. SUPPLEMENTARY READING

BY ROBERT C. METCALF, BOSTON, MASS.

[WRITTEN FOR THIS REPORT AT THE REQUEST OF SHERMAN WILLIAMS]

The term "supplementary reading" usually includes all books used in school except text-books and reference-books. The "school reader" is not a book for supplementary reading. Geographies and histories are text-books; dictionaries and encyclopædias are reference-books. Supplementary reading is additional reading matter to be used for various purposes.

1. Some supplementary reading is designed to train pupils in the reading of good books. This kind of reading meets the demand of those who say that, having taught the child to read, we should teach him what to read. It leads directly to the reading of the best literature. It contributes to the æsthetic culture of the one who reads. It broadens and

deepens his daily living by making the mind more keenly alive to all that is beautiful in nature and in art. It enriches life by bringing to it the inheritance of the best thought of past ages.

2. Another kind of supplementary reading may be termed "collateral." It is used to supplement the work in history, geography, and science. It enlarges the pupil's view of the subject in hand. It helps him in clearing up doubtful points. It shows him the truth from the standpoint of another writer. It strengthens the impression upon his mind, and makes it more permanent. Undoubtedly it adds greatly to the interest which pupils take in their school studies, and, hence, is of very great value. Supplementary reading of all kinds has a direct bearing upon the pupil's English. Unconsciously he is influenced by the style of an author, and is impressed by his thought and by his choice of words to give the thought expression. If the teacher is a man or woman of culture, this impression is deepened by a judicious discussion of what is read, and by a somewhat careful examination of the author's mode of expressing his thought. But while we say that supplementary reading has a direct bearing upon the pupil's English, it should not be inferred that the teacher's main purpose, while using the supplementary reading, is the improvement of the pupil's ordinary mode of expression. The main purpose is the improvement of the pupil's thought, the bringing him into intimate relations with the best minds of the literary world, and the giving of frequent opportunity for this influence to shape his expression.

REFERENCE-BOOKS AND BOOKS FOR COLLATERAL READING

Books of reference and books for collateral reading should be furnished generously to all teachers, whether in graded or ungraded schools. It is necessary that such books should be near at hand when occasions for their use arise. It is when the pupil is eager to learn, when his interest is most intense, that the information should be furnished. To wait until the close of school, when some library may be visited, or even to wait until a book may be secured from some other room in the same building, is often fatal to the purpose of the teacher. "Strike when the iron is hot," is a rule equally applicable to pedagogics and mechanics. Collateral books should be consulted in the presence of the teacher, so that he may direct the search of the pupil. To use reference-books to advantage requires much skill. To "run down" a subject will often require the use of several collateral or reference-books, and the pupil needs training in this work. One book may give only a hint of the information wanted, and this hint would be lost upon a pupil who had not been trained to seek for information. It is a mistake to appoint only the few bright pupils to consult reference-books. All need this training, and the teacher must not only use skill, but he must be patient while the slow, and even the dull, acquire this power of investigation. The teacher must always

keep in mind that mere information, a knowledge of facts, is but secondary in the education of his pupils. Knowing how to consult books for information is often of more value than the facts themselves. "How to use books" is of prime importance in the education of the child. Hence the value of reference-books and books for collateral reading, and the importance of careful and systematic training in their use in schools of all grades.

BOOKS FOR GENERAL READING

Training pupils in the reading of good books for the purpose of cultivating a taste for what is best in literature must receive more extended treatment. We have in mind now not so much the increase of the pupil's scholarship as the systematic training of his moral nature — not so much the intellect as the heart. The child must be led to love that which is lovely and to hate that which is hateful. When the two are presented for his choice, he must involuntarily choose the former. One who hesitates is lost.

Books for general reading, to be used for the purpose just named, should, when possible, be furnished in sets, the number of volumes in a set being equal to the number of pupils in the class. These books should be well written, have a high moral purpose, and be of such a character as to interest the pupils for whom they are intended. They should be books of travel, biographies of famous men and women, historical stories, and works of fiction suited to the age and intellectual growth of the pupils. In the selection of books, it should be borne in mind that with parents or with teachers children will read and will enjoy books of a much higher grade than they would be likely to select for their own reading. Boys and girls of twelve or fourteen years of age, whose tastes have had no special training, will listen with eagerness to Thackeray, Dickens, and Scott, to Longfellow, Holmes, and Tennyson, if a mother or some favorite teacher reads aloud to them. Care must be taken, however, that the reading matter be suited to the age and advancement of the pupils, for much of the reading should be done by themselves. The reading from the large sets of books just described should be done by the pupils at home. A chapter or a given number of pages should be assigned by the teacher, to be read by the children as an evening lesson. The teacher must prepare his work as carefully as the work on any evening lesson should be prepared. Notes should be taken of points worthy of comment, characters worthy of study, and natural objects worthy of being described. In short, such preparation by the teacher should be made as will enable him to call the attention of his pupils to what is likely to interest or instruct.

This preparation having been made by both teacher and pupils, the work of the "reading hour" will be full of interest. This "hour" falls

on the day following the home preparation, and usually occurs but once in each week. The books are all returned by the pupils, and in response to simple notes, hints, or suggestions by the teacher, they tell the story in their own words. Characters introduced by the author should be discussed in a simple way; references to natural scenery and to works of art should be pictured to the imagination, and described by the children as a test of the correctness of their mind pictures; and, finally, the study should reach back to the author as one who has become, for the time being, a companion of the children, and who is worthy of their love. Pupils soon begin to appreciate the skill of an author in so arranging the incidents of his story as to bring out the peculiar qualities of his characters. Their interest is enlisted in behalf of the good and the true, and they instinctively loathe that which is low, mean, and dishonorable.

The deepest impressions are often made when works of fiction are under discussion. Here the author is not required to confine himself to facts, but may use his imagination and his judgment in outlining the peculiarities of his characters. A portrait may be a perfect likeness and yet may seem to flatter the subject. The painter has produced his likeness by combining a number of "best expressions" taken at different sittings. Dr. Watson (Ian Maclaren) explains that his "Dr. MacLure" was a composite, made of lovable characteristics borrowed from a number of physicians whom he knew. So it is in the best fiction — an ideal character is presented, having perhaps no prototype in real life, but formed from characteristics which are easily recognized in many of our friends or acquaintances. Thus the best and deepest impressions made upon children — yes, and upon adults also — are often gained from a careful reading of the best fiction. The reading hour gives an opportunity for conversation, and even for discussion, which may be of the greatest value to the pupils. Not only will a love for reading be gained, but a taste for good reading will be cultivated which will protect them from much that is harmful and debasing.

The conversations and discussions connected with the reading hour are also of great help to the children in their use of English. The reading furnishes them with thoughts, their interest in what has been read gives them a strong desire to express their thoughts, and thus the conditions are favorable for the best kind of language work. It is by practice that we learn to use English, and by careful practice that we learn to use it well. The gain in the pupils' ability to express themselves in good English by such practice as has been indicated will be so marked, and even extraordinary, that teachers are in danger of using the reading hour for a language lesson rather than for the higher purpose of cultivating a taste for good reading.

It will be remembered that the kind of work described above can be carried on to the best advantage when large sets of books are furnished

and the reading of the children is done at home. But, on account of the expense, large sets of books are not always available. If there are several classes in the town or village, all of the same grade, expense may be saved by sending the books from class to class, thus giving an opportunity for several readings of the same book during the same year. Three full sets of books circulated among three classes will probably furnish each one with all the reading matter needed during the year; and then, as these pupils pass on to a higher grade, they find three different sets for their use during the succeeding year. Thus the expense of furnishing the schools of a given town with large sets (forty or fifty volumes) of books for supplementary reading is not so great as might be supposed.

HOW TO USE SMALL SETS OF SUPPLEMENTARY READERS

It is doubtless true that the large sets of books, to be read at home by the pupils, and to be followed by a conversational exercise during the "reading hour," are better adapted for use in the grades above the sixth than in any of the lower grades. Experience has seemed to prove that the art of reading must be carefully taught during the first six years in school, and success in teaching depends largely upon an abundance of practice, which requires and abundance of time. To meet this demand for time, teachers have been compelled to substitute in place of the home reading, which has been described above, a semi-weekly exercise in class reading during school hours. In other words, the time for reading, in the six lower grades, has been divided between *teaching* reading, where much time is given to training in the art of oral expression, and *practice* in reading, where special attention is given to gathering thought from the printed page, and later to restating the thought by the children in their own words.

When supplementary books are read in the class-room, the progress in reading is much less rapid, and there is great danger that pupils will lose their interest in the work; but a skillful teacher will overcome this difficulty, and will avoid the danger by reading, occasionally, a chapter to the class, or by giving with sufficient fullness the substance of certain portions of the book.

Much good work may be done in the six lower grades with sets of only three supplementary books. One book is used by the teacher, and the other two are in the hands of pupils. One of the pupils reads aloud to the class while the rest listen to the reading. All must be prepared to tell in their own words the substance of what has been read. The books composing these sets must be carefully selected, and should be of such a character as will secure the interest of the children. If carefully selected, the pupils will listen with the closest attention; moreover, they will demand of the pupil reader his best effort, in order that they may get the full benefit of the story.

The exercise in the reproduction of the story which has been read, and in the discussion of matters of interest connected with the reading, is the same in kind as that which has already been described. The language exercise which follows this reading will prove just as fruitful with the little children as with those who are more advanced.

The exercise in listening is in itself of great value, for it trains the pupils in hearing and in telling, and thus contributes much to the comfort of the teacher in most of his exercises in the class-room.

POETRY

A love for poetry seems to be innate with children; its first manifestation being in the nursery where *Mother Goose* and similar collections of nursery songs furnish a pharmacopœia sufficient for the healing of most of the sorrows of babyhood. Fairy tales and folk stories, fanciful tales and wonder books, follow in order, and furnish an abundance of literature for the primary-school age. The child's fancy finds free range, and his world is pictured with images of beautiful spirits whom he has learned to love, or of evil spirits from whom he shrinks. Later these fancies find their illustrations in real life, and the lessons of childhood become the foundation of the wisdom of maturer years.

Memory gems of a few lines each, and short poems adapted to children of the primary-school age, should be read aloud by the teacher, and committed and recited by the pupils. The poems should be carefully selected, and none but the best admitted to the treasury of the school-room. The teacher should feel that he is selecting and hanging pictures for all time, and that the children's minds are the art rooms which he is furnishing. His selections must be the most helpful, as well as the most beautiful, of the productions of our best artists.

In the grammar-school grades, experience has shown that the best results have been gained when the works of one poet have been studied by the pupils for a year. A miscellaneous collection of poems may interest, and the poems may instruct the children who read and commit them to memory, but no piece of literature, whether prose or poetry, accomplishes its highest good with the student until his study reaches back from the letter of the work to the soul of the author, and a year's time is none too long to gain that intimate acquaintance which alone will reveal the choicest treasures of the author's heart. Some of the most satisfactory work in literature in grammar schools may be traced directly to a love for the poet, born into the heart of the pupils thru reading his life in the thoughts woven into the lines he has written. Whittier, and Holmes, and Longfellow, and Lowell become patron saints to the children who for months in succession look into their faces, think their thoughts, and feel the inspiration of their genius.

A few books only are necessary for the study of poetry, but every

schoolroom should contain a library of well-selected works for ready reference, and for use by the pupils during their leisure hours.

This report can be brought to a close most fittingly by two or three brief extracts from *Books and Culture*, by Hamilton Wright Mabie:

There is no magic about the process of enriching one's self by absorbing the best books; it is simply a matter of sound habits patiently formed and persistently kept up. Making the most of one's time is the first of these habits; utilizing the spare hours, the unemployed minutes, no less than those longer periods which the more fortunate enjoy. To "take time by the forelock" in this way, however, one must have his book at hand when the precious minute arrives. There must be no fumbling for the right volume; no waste of time because one is uncertain what to take up next. The waste of opportunity which leaves so many people intellectually barren who ought to be intellectually rich is due to neglect to decide in advance what direction one's reading shall take, and neglect to keep the book of the moment at hand.

To learn how to treat the odds and ends of hours so that they constitute, for practical purposes, an unbroken duration of time, is to emancipate one's self from dependence on particular times, and to appropriate all time to one's use; and, in like manner, to accustom one's self to make use of all places, however thronged and public, as if they were private and secluded, is to free one's self from bondage to a particular locality, or to surroundings specially chosen for the purpose.

Within the compass of a very small room, on a very few shelves, the real story of man in this world may be collected in the books of life in which it is written; and the solitary reader, whose personal contacts with men and events are few and lacking in distinction and interest, may enter, through his books, into the most thrilling life of the race in some of its most significant moments.

IV. THE RELATION OF THE SCHOOL TO LIBRARIES

THE FUNCTION OF THE SCHOOL IN INTRODUCING CHILDREN TO THE PROPER USE OF BOOKS

The center around which cluster all the problems which relate to the reading habits of children is the public school. The family, in many cases, is doing more than the school, to be sure, but it is the school, after all, in the great average of cases, which must give the children a taste for books and an introduction to their proper use. It is only in exceptional cases that parents have knowledge and the means to supply children with suitable books, and, what is more important, with the right guidance and sympathy in making a close acquaintance with them.

We may well inquire, therefore, what the proper function of the school is in teaching the great body of children how to appreciate and use the best books. Within the last few years teachers have begun to realize that this is one of the few great privileges and duties of the school. To teach children *how to read* so that they could make use of books, newspapers, etc., was once looked upon as a chief object of school work. We now go far beyond this and ask that teachers lead the children into the fields of

choice reading matter, and cultivate in them such a taste and appreciation for a considerable number of the best books ever written that all their lives will be enriched by what they read. This is one of the grand but simple ideals of the schoolroom, and lends great dignity to every teacher's work in the common schools. The most solid and satisfactory reasons can be given why this should be done in every schoolroom. These substantial materials of culture belong to every child without exception. They are an indispensable part of that general cultivation which is the birthright of every boy and girl. The child that by the age of fourteen has not read *Robinson Crusoe*, *Hiawatha*, *Pilgrim's Progress*, *The Stories of Greek Heroes* by Kingsley and Hawthorne, *The Lays of Ancient Rome*, *Paul Revere's Ride*, *Gulliver's Travels*, *The Arabian Nights*, *Sleepy Hollow*, *Rip Van Winkle*, *The Tales of the White Hills*, *The Courtship of Miles Standish*, Scott's *Tales of a Grandfather*, *Marmion*, and *Lady of the Lake*, the story of Ulysses and the Trojan war, of Siegfried, William Tell, Alfred, and John Smith, of Columbus, Washington, and Lincoln — the boy or girl who has grown up to the age of fourteen without a chance to read and thoroly enjoy these books has been robbed of a great fundamental right; a right which can never be made good by any subsequent privileges or grants. It is not a question of learning how to read — all children who go to school learn that; it is the vastly greater question of appreciating and enjoying the best things which are worth reading. Judged on this standard of worth, the reading exercises of our schools have acquired a tenfold deeper significance, and all teachers who have looked into the matter have felt a new enthusiasm for the grand opportunities of common-school education. There is no doubt whatever, among intelligent people, that good literature is a powerful instrument of education. It is by no means the whole of education, but when the reading habits of children are properly directed, their interest in suitable books cultivated and strengthened, their characters are strongly tinctured and influenced by what they read. If their minds are thus filled up with such stimulating thought-material, and their sympathies and interests awakened and cultivated by such ennobling thoughts, the better side of character has a deep, rich soil into which it may strike its roots. So profound has been the conviction of leading educators upon the value of the reading matter of the schools for the best purposes of true education that the whole plan of study and the whole method of treatment and discussion, as touching these materials, have been reorganized with a view to putting all children into possession of this great birthright.

To prove this we will state briefly a few of the changes which have already taken place in many of our best schools:

1. Good literature of high quality, from the fertile brains of the greatest writers, has been put into every grade of the common school, from the first year on. This means, of course, that all sorts of information books

in geography, science, history, etc., have given place to better, classic material. We shall see later that these information books have their proper place in school work, but they should never be allowed to crowd out the people's bible of good literature.

2. In the first three grades, since children have not yet learned to read, but are in the process of acquiring this art, they must get their introduction to the best stories suited to their age by the oral presentation of the teacher. Teachers of primary and intermediate grades are everywhere rapidly acquiring the art of presenting stories, and the stories which they offer are the best which the literature of Europe and America has thus far produced. The result is that the teachers themselves are becoming deeply interested in this material, and they are discovering how powerful and stimulating its influence is upon children. The children are aroused to a new interest in school work, in striking contrast to the dullness and tedium of the old *a-b-c* method in learning to read.

3. The works of our best American writers — Bryant, Longfellow, Emerson, Whittier, Holmes, Lowell, Hawthorne, Irving, Burroughs, and others — have acquired a new and untold significance for American children. These men themselves, without exception, were exemplars of a simple, elevated mode of life, thoroly patriotic and American, and beautiful illustrations of those words of Longfellow familiar to every school child :

> Lives of great men all remind us
> We can make our lives sublime,
> And departing leave behind us
> Footprints on the sands of time.

4. One of the strong marks of this genuine literary revival in our common schools is the rapidly growing disposition to read literary wholes, not selections or fragments — the whole of *Snow Bound* and *Among the Hills*, of *The Building of the Ship*, of Ruskin's *King of the Golden River*, of Webster's *Speech at Bunker Hill*, of the *Vision of Sir Launfal*, of Emerson's *American Scholar*, of *Gulliver's Voyage to Lilliput*, of *Horatius at the Bridge*, of *The Hunting of the Deer*, of Bryant's *Sella*, of Burroughs' *Birds and Bees*, etc. This reading of the masterpieces as wholes with children in the regular reading exercises of the school has opened the eyes of teachers and pupils in an astonishing way, and is destined, moreover, under still better teaching in the future, to give a depth and spiritual value to the work of our schools which are beyond all price.

We have discovered, also, that the best English writers are as much ours as our cousins' across the water; that Shakespeare, Ruskin, Tennyson, Arnold, Burke, Scott, and Addison are fully as valuable to us as our own writers, and that their works also must be read as literary wholes.

5. A new principle for the grading and arrangement of literary materials thruout the school classes has been applied. The suitableness of the

thought, the appropriateness of the story to arouse the interest and sympathy of the children, are made the chief test to determine the place in the grades where a literary whole shall be used. In this way the *child* has become the center of study, and a very common-sense, practical result has ensued. Children are asked to read what best fits their age, temper, and understanding. It is no longer a question of learning to read, but of learning to appreciate and enjoy what is most worthy the attention of a child. It is the development of the best feeling and intelligence of children, rather than a droning over words and phrases in a mechanical process of learning to read. That children learn to read fluently and with expression is certain just to the extent of their true appreciation and insight.

It has been discovered that the literatures of America, England, Europe, and Asia are already drawn upon to find just the best-suited materials for children of the successive grades. We may yet find that stories as diverse in origin and location as *Hiawatha*, *Robin Hood*, *Don Quixote*, *Siegfried*, *Ulysses*, *Sinbad the Sailor*, the *Lilliputians*, and *Joseph in Egypt* are needed at different points in the school course to give children what best suits their mental growth. At any rate, we are rapidly finding out that the best of all the ages, from Abraham to Kipling's *Jungle Stories*, is needed to educate children. It is an inspiring thought that the proper bringing up of a commonplace American child requires us to sift out the gold nuggets from a whole series of civilizations. This sifting and arranging of materials has been going on for many years, and the series of standard books now recommended for children in some of our best schools insures to them the stimulating and liberalizing influence of a large number of the best books of great authors.

This body of educative thought-material, properly handled, discussed, and read in the schools, becomes the *nucleus* around which to collect and organize the reading of a lifetime. Moreover, the interests and tastes cultivated upon these books will determine what kind of books and to what extent they will be read in the following years.

Having insured a proper place and respect for this indispensable nucleus in which reading habits and tastes are to find root and grow strong, we may next inquire into the function of the school in giving children a proper opinion of the value and use of the great body of *information books*, history stories, geographical readers, travels, biographies, science narratives and descriptions, histories, current magazines, reference-books, etc., which contribute so largely to a full equipment for life.

Within the last few years great progress has been made toward supplying the schools with a large quantity and variety of supplementary and informational reading. The lessons in history, geography, and natural

science are constantly enlarged and enriched by this sort of reading, to which children are freely referred in studying their lessons.

This use of varied material requires greater skill upon the part of teachers, a wider range of information, and the ability to organize and unify these diverse sources of information with the regular lessons. But this kind of study, if carefully planned and skillfully executed, gives the boys and girls better materials of thought, more independence in using books, and a wider range of knowledge. It points directly to the library as a necessary and very efficient agency of popular education.

A small library is becoming indispensable to the teachers and pupils of the grammar school in carrying out the legitimate work of the school. In order to give definiteness to this idea of a small library, suppose it to consist of five hundred to one thousand books, containing the best classic stories, poems, biographies, histories, travels, novels, and books of science suitable for the use of children below the high school. The necessity for such a choice selection of library books is made evident by an examination of the children's present studies in history, geography, and science. History stories are now read in nearly every grade of the common school, to some extent even in the primary. Only a few years ago it was customary to limit the historical studies to the final year of the grammar school, to what is now generally known as the eighth grade. But now history stories are regularly used in all the grades, from the third to the eighth, inclusive. In the third, fourth, and fifth grades, or years, of the common school, stories are skillfully narrated by the teacher, discussed, and reproduced by the children. It is possible in this way to give them a very keen and hearty impulse toward biography and history. With this interest thoroly awakened upon the biographies of such American heroes as William Penn, John Smith, Columbus, Magellan, Williams, La Salle, Champlain, George Rogers Clark, Lincoln, and Fremont, it is very easy to introduce children to that considerable body of American biography which is the very best introduction to American history.

The elements of heroism and adventure, the strong traits of personal character and manliness, which these American stories exhibit, give these historical stories a great moral value. At the same time the dreary memory drill upon the skeleton outlines of political events has given way to a native interest and enthusiasm for the striking personalities in our past life as a nation.

Closely allied to this early biographical story of our own country are the famous epic stories of European countries, the stories of Alfred, King Richard, William Tell, Romulus, Horatius, Ulysses, and Achilles, and such historical narratives as the *Retreat of the Ten Thousand*, *The Struggles of Thermopylæ and Marathon*, Scott's *Tales of a Grandfather*, and other famous stories, which in most cases have a strong historical setting and significance. Our schools are now being abundantly supplied

with interesting and instructive books of this character. Only a few of them can be thoroly worked over and assimilated during school hours. Enough, however, can be done and is being done, in many cases, to give a vigorous training in this kind of study, and to awaken interests which soon grow into habits of study. In order to give the great body of teachers unmistakable proofs of the variety and excellence of these historical stories and poems, a short list of choice books will be appended to this article.

Now, it is evident that a carefully selected library of the best books of this character should be found in every grammar school. There will be a considerable number of boys and girls in every school who will be well prepared by such school studies as we have just described for a profitable use of these books in private reading. Children in general cannot supply these books. The parents, in most cases, have neither the means nor the judgment for their proper selection. There should be no ambition on the part of teachers to make bookworms of children, and it is certainly advisable to avoid an indiscriminate and loose reading of many books. The teachers should not only give children a careful and appreciative introduction to a few of the best books, but they should also try to advise and assist children in forming profitable habits of reading. In occasional general exercises before the whole school, and in private talks with the children, many a valuable hint may be given in regard to what books to read and re-read, how to study out and appreciate the characters, in short, how to assimilate what they get from books.

In geographical studies a change, somewhat similar to that which has taken place in history studies, has been brought about in the last ten years. Instead of the meager outlines of geographical topics, and in place of the endless map questions and names for memorizing from the third grade on, we have begun to select instructive and interesting topics, which are treated with a richness of detail, illustration, and description that awakens the best thought and interest of children.

Much of this work also has to be done in the early grades by the oral presentation of the teacher, and after a year or two of such home geography, by excursion and descriptive geography, by important topics, the children are prepared for making a good use of the geographical readers and books of travel, which have now attained great excellence and value. Here again it is necessary that the school library shall be well equipped with a careful selection of the best recent books.

It need not be feared that this method of study and use of books will lead to a superficial, fragmentary, or unsystematic knowledge, but it will require better class-room instruction on the part of the teachers, and more ability to organize knowledge derived from reference and other library books. Here again, as in history, quite a goodly number of the children may be led on to excellent habits of voluntary and private study.

Perhaps the best proof of the right instruction in the class-room is the tendency of children to extend their knowledge by later voluntary readings in the use of the library.

A short list of books will also indicate how enterprising our best book firms are in supplying what our libraries need in the way of geographical readers, travels, guide-books, picturesque narratives, etc.

In the field of natural science there is a third great realm of study which has been lately brought under the direct jurisdiction of the school-master. It is only within the last few years that any considerable number of school-masters and school-mistresses have begun to appreciate what a glorious field of study has been opened to the common school. But books and libraries seem to stand in a different relation to nature study from that already ascribed to history and geography. In this case nature herself is the book to be studied, and no artificial book should come in between the observer and the leaves of nature's own book. Nature study, when properly managed in elementary schools, is a direct protest against the wrong use of books. By means of excursions upon the campus, in the fields, gardens, and woods; by experiments in physics and chemistry, in the laboratory; by watching birds among the trees, insects upon the pond, butterflies on the clover, trees in their blossoms and fruitage, the weeds by the roadside, vegetables in the garden, the children are acquiring the first indispensable impressions and that happy enjoyment of the wonders and beauties surrounding them in nature without which all later study from books and scientific treatises is unreal and unmeaning.

After all, the difference between science and the other studies (history and geography) is not so great. We do not begin history and geography with books in the first two or three years, but with oral discussion and presentation. In fact, no study can be properly begun with children from books. It is only after the children have acquired some taste for a study and have accumulated considerable knowledge in its concrete forms that books can be used to advantage. And so it is with books of science.

In the first four grades of the common schools, and to a large extent in the higher grades, science studies should be carried on almost wholly without books. Their appreciation and insight into nature in many directions should be steadily cultivated, not thru the reading of books, but by direct contact of the senses and by exercise of the thinking powers upon present objects. Most of the efforts thus far made to introduce children to nature by means of books are farcical and fruitless. But as the children grow older, having accumulated a considerable variety of knowledge and sympathy for nature study, the best books on these subjects will be found very helpful. The teachers, indeed, will find books necessary at all times in guiding their efforts in nature study; but with this we are not now chiefly concerned. It will be found that for children in

the intermediate and grammar grades there is quite a collection of science books that should be made easily accessible to them in the library. Indeed, some of them can be used to advantage in the supplementary reading in the grades in reading classes. Such, for example, are *Short Stories of Our Shy Neighbors*, by Mrs. Kelly; *Glimpses of the Plant World*, by Fanny Bugen, and *Town Geology*, by Charles Kingsley. Another class of books that children should learn to enjoy is that of Burroughs and Thoreau — the sympathetic and literary side of nature study. Some of these, like *Birds and Bees* and *Wild Apples*, like the poems of Bryant and Whittier, have gone into our school readings as classics. Then there are the works of the masters of science, Huxley, Tyndall, Darwin, etc., which combine scientific knowledge and genius with literary power, and are great books for students and adults to read. It is now possible to make up a list of science books, one or two hundred in number, which would add greatly to the value of a school library. There is also a great need for teachers to be more abundantly supplied with these fuller and more inspiring sources of study as a help and guide in observation.

We have seen, thus, that, besides the usual reference-books such as dictionaries, cyclopædias, atlases, etc., there are four great groups or classes of books which need to be carefully selected and well represented in a typical school library.

1. The best permanent literary books suitable for children's study and reading. This, for general educative purposes, must remain the nucleus of any school library.
2. Historical stories, biographies, narratives, and histories.
3. Geographical readers and books of travel.
4. Books on the leading phases of natural science.

The extent to which such a library is well used is a significant test of the efficiency of our whole educational activity in the schools.

It will be seen from the preceding discussion that the purpose of the school, in addition to teaching children to read, is to give them a spirited introduction to the chief kinds of reading matter, to develop such tastes and habits of reading and consulting books that they will be disposed in their later years to make the best use of their power to read. The mere ability to read is of very little value; in some cases it is a positive misfortune, when the reading matter is vicious and the taste for such demoralizing books is cultivated. When the children are ready to leave school, their self-education will begin in earnest. One of the best things that the school can do is to launch people upon their independent life with a taste for good reading matter and a judgment sufficiently developed for selecting the right classes of books. The school library and the public library must furnish the chief opportunities for children in their later school years, and during the years which follow school life, for carrying

out any plans of reading. The teachers and parents and the librarian, as far as possible, should come to an understanding and agreement as to what books they would recommend, and encourage children to read.

One of the results of the attention recently paid to good literature in our schools is seen in the growing disposition of parents and children to read and discuss the standard books together. Many of the more intelligent and thoughtful parents are willing to spend their evenings with their children, reading and interpreting such books as *Gulliver's Travels*, Hawthorne's *Grandfather's Chair*, the lives of Lincoln, Webster, and other Americans, the story of Ulysses, the stories of King Arthur, the Greek heroes, the Bible stories, and also the plays of Shakespeare, Plutarch's *Lives*, historical biographies, and other books of history and travel, as well as of geography and science.

It is not uncommon for teachers and principals of schools to call together the parents and explain the character of our reading matter, the selection of proper books for children, and the advantages of parents reading with their children. There is, probably, no one thing that can accomplish more in making the home what it ought to be than such home readings of books which are recognized by all as among the best. Fortunately, the parents will be benefited as much as the children; for the books that we have had in mind are just as interesting and valuable to grown people as to children. They are books that do not lose their charm. Much has already been done in this direction; but vastly more must be done in the future. The home and the school properly working together can do a great deal in this way in creating a happy and healthful moral atmosphere, which is most favorable to the development of strong and symmetrical characters. What has been done, therefore, is only a beginning of what should be done all over this land and for the children of all classes in myriads of homes. But to accomplish this, libraries must be numerous and well equipped, far beyond anything which is common among us now. The public library, with its well-stored shelves of choice books, becomes as necessary as the schoolhouse itself. The librarian, trained and cultivated, should know as well as the teachers themselves what books are suitable for school children and young people. Librarians, therefore, should not only be experts in classifying and cataloging books, but they should be trained experts in estimating and selecting reading matter for educative purposes. Many of the professional librarians have already responded to this requirement, and a great deal has been done in some of our towns and cities, like Boston, Minneapolis, New York city, and smaller cities, to bring the public librarians into vital touch with school children during these years of educative growth and character-building.

A library should furnish a good collection of books in all the principal departments of study. In this way a child in the course of his education

may widen out his knowledge and interests in many directions. For the sake of general, all-sided culture it is desirable that a child should be many-sided in his development, and yet a library may produce an excellent effect upon a child by giving him an opportunity for cultivating a strong liking for one limited class of books. It is a great and successful stroke of education thoroly to awaken and interest a child in one branch of study, and to make him acquainted with a few of the masterpieces in this narrow field. This one enthusiasm may be enough to make a reader and student, while a child who has never acquired a taste for any one class of books will remain dull, and shallow, and commonplace. From this standpoint, a good library, even tho it be not very large, may contribute efficiently to the educational growth of a variety of students.

In fact, the library can do for the student what no school can do. It can furnish the opportunity for that fuller and richer study in any one branch of science in which the student has become deeply interested. The school of necessity covers all branches of study with about equal or impartial care. It cannot go deeply into any subject. The best it can do is to open up the subject and develop a healthy and hearty appetite for that kind of knowledge. But the library can furnish just that broader and select material which can develop a strong and permanent enthusiasm. The school can do little more than awaken an appreciation for a few masterpieces of forensic literature; but the library should contain all the great speeches of Burke, Fox, Chatham, Cicero, Webster, Sumner, etc., where the boys who have a special taste for this kind of literature can find the best in abundance. The same is true for those who have a taste for history, or art, or the drama, or fiction, or biology.

CHARLES A. MCMURRY.

CLASSIC READINGS FOR THE FIRST FOUR GRADES OF THE COMMON SCHOOLS

The Adventures of a Brownie (for teacher), Harper & Brothers.
Kindergarten Stories and Morning Talks (Wiltse), Ginn & Co.
Talks for Kindergartens and Primary Schools (Wiltse), Ginn & Co.
Grimm's Fairy Tales (Wiltse), Ginn & Co.
German Fairy Tales (Grimm), Maynard, Merrill & Co.
Fables and Folk Lore (Scudder), Houghton, Mifflin & Co.
Danish Fairy Tales (Andersen), Maynard, Merrill & Co.
Poetry for Children (Eliot), Houghton, Mifflin & Co.
The Story Hour (Wiggin), Houghton, Mifflin & Co.
Robinson Crusoe, Public School Publishing Co.
Æsop's Fables (Stickney), Ginn & Co.
Andersen's Fairy Tales, Part I, Ginn & Co.
Seven Little Sisters, Ginn & Co.
Hans Andersen's Stories, Houghton, Mifflin & Co.
Fairy Tales in Verse and Prose (Rolfe), Harper & Brothers.
Stories Mother Nature Told her Children, Ginn & Co.

Andersen's Fairy Tales, Part II, Ginn & Co.
Child Life in Poetry, Houghton, Mifflin & Co.
Child Life in Prose, Houghton, Mifflin & Co.
Arabian Nights ("Aladdin"), Maynard, Merrill & Co.
Six Stories from the Arabian Nights, Houghton, Mifflin & Co.
Gulliver's Voyage to Lilliput, Maynard, Merrill & Co.
Kingsley's *Greek Heroes*, Ginn & Co.
Hawthorne's *Tanglewood Tales*, Houghton, Mifflin & Co.
Arabian Nights (Hale), Ginn & Co.
Gods and Heroes, Ginn & Co.
Gulliver's Travels, Ginn & Co.
Adventures of Ulysses (Lamb), Ginn & Co.
Hawthorne's *Wonder Book*, Houghton, Mifflin & Co.
Stories of the Old World (Church), Ginn & Co.
Ulysses among the Phœnicians (Bryant), Houghton, Mifflin & Co.
Kingsley's *Water Babies*, The Macmillan Co.; Ginn & Co.

CLASSIC READINGS FOR THE FIFTH TO THE EIGHTH GRADES OF THE COMMON SCHOOL

Hiawatha, Houghton, Mifflin & Co.
Lays of Ancient Rome, Houghton, Mifflin & Co.; Maynard, Merrill & Co.
King of the Golden River, Ginn & Co.
Stories from Herodotus, Maynard, Merrill & Co.
Children's Treasury of English Song (choice poems, fourth to seventh grades), The Macmillan Co.
Grandfather's Chair, Houghton, Mifflin & Co.
The Sketch Book, Ginn & Co.; American Book Co.; Maynard, Merrill & Co.
Miles Standish, Houghton, Mifflin & Co.
Snow Bound, etc., Houghton, Mifflin & Co.
Tales of a Grandfather, Ginn & Co.
Birds and Bees, Houghton, Mifflin & Co.
Dickens' *Christmas Carol* and *Cricket on the Hearth*, Houghton, Mifflin & Co.
The Christmas Carol, Houghton, Mifflin & Co.; Maynard, Merrill & Co.
The Stories of Waverley, The Macmillan Co.
The Lay of the Last Minstrel, Ginn & Co.; Maynard, Merrill & Co.
Autobiography of Benjamin Franklin, Ginn & Co.; Houghton, Mifflin & Co.; Maynard, Merrill & Co.
Hunting of the Deer, etc., Houghton, Mifflin & Co.
Bunyan's *Pilgrim's Progress*, Ginn & Co.
Evangeline, Houghton, Mifflin & Co.; Maynard, Merrill & Co.
Grandmother's Story of Bunker Hill, etc., Houghton, Mifflin & Co.
Sella, Thanatopsis, and Other Poems, Houghton, Mifflin & Co.; Maynard, Merrill & Co.
Tales of Shakspeare (Lamb), The Macmillan Co.
Sharp Eyes and Other Papers, Houghton, Mifflin & Co.
Tales of the White Hills (Hawthorne), Houghton, Mifflin & Co.
Enoch Arden and *The Lotus Eaters*, Maynard, Merrill & Co.
Sohrab and Rustum, Leach, Shewell & Sanborn; American Book Co.
Bunker Hill Monument (Webster), Ginn & Co.; Houghton, Mifflin & Co.; Leach, Shewell & Sanborn; American Book Co.
Seven American Classics, American Book Co.
Cricket on the Hearth, Houghton, Mifflin & Co.; Maynard, Merrill & Co.

The Succession of Forest Trees, Houghton, Mifflin & Co.
Peasant and Prince, Ginn & Co.
Rab and his Friends (Brown), Home Book Co.; Maynard, Merrill & Co.
Silas Marner (Eliot), Leach, Shewell & Sanborn.
Vision of Sir Launfal, Houghton, Mifflin & Co.
Under the Old Elm, etc., Houghton, Mifflin & Co.
Julius Cæsar, American Book Co.
Lady of the Lake, American Book Co.; Maynard, Merrill & Co.; Ginn & Co.; Houghton, Mifflin & Co.
Burke's American Orations, D. C. Heath & Co.; Maynard, Merrill & Co.
Webster's Reply to Hayne, Maynard, Merrill & Co.
Lincoln's Gettysburg Speech, etc., Houghton, Mifflin & Co.
Merchant of Venice, American Book Co.; Ginn & Co.
Marmion, Ginn & Co.; Maynard, Merrill & Co.; Houghton, Mifflin & Co.
Masterpieces of American Literature, Houghton, Mifflin & Co.
Roger de Coverley Papers, American Book Co.; Houghton, Mifflin & Co.; Leach, Shewell & Sanborn.
Selections from Ruskin, Ginn & Co.; Leach, Shewell & Sanborn.
Emerson's *Fortune of the Republic*, etc., Houghton, Mifflin & Co.
Bacon's Essays, Ginn & Co.; Maynard, Merrill & Co.
The Holy Grail and *Sir Galahad*, Maynard, Merrill & Co.
The American Scholar, etc. (Emerson), American Book Co.
Plutarch's Lives, Ginn & Co.
Vicar of Wakefield, Ginn & Co.
Rasselas, Leach, Shewell & Sanborn; Ginn & Co.
Swiss Family Robinson, Ginn & Co.
Irving's *Alhambra*, Ginn & Co.
Readings from the Spectator, Educational Publishing Co.
Tom Brown at Rugby, Ginn & Co.
Longfellow's *Tales of a Wayside Inn*, Houghton, Mifflin & Co.
The Peasant and the Prince, Ginn & Co.
Peabody's *Old Greek Folk Stories*, Houghton, Mifflin & Co.
Undine, Ginn & Co.
Selections from Ruskin, Ginn & Co.
German Household Tales (Grimm), Houghton, Mifflin & Co.
Stories from the Arabian Nights, Houghton, Mifflin & Co.
The Hoosier School-Boy, Chas. Scribner's Sons.
Homer's Iliad (Pope's), Ginn & Co.
Don Quixote, Ginn & Co.
Fanciful Tales (Stockton), Chas. Scribner's Sons.
Being a Boy, Houghton, Mifflin & Co.
Tom Brown's School Days (Hughes), Houghton, Mifflin & Co.
Scott's *Quentin Durward*, Ginn & Co.

BOOKS OF SCIENCE

A Few Familiar Flowers, Ginn & Co.
Outdoor Studies, American Book Co.
The Story of the Solar System, D. Appleton & Co.
Botany for Young People (Gray), American Book Co.
The Story of a Piece of Coal, D. Appleton & Co.
Town Geology, The Macmillan Co.

Coal and Coal Mines, Houghton, Mifflin & Co.
Birds of Village and Field, Houghton, Mifflin & Co.
In Birdland (Keyser), A. C. McClurg & Co.
Bird Life, D. Appleton & Co.
Familiar Trees and their Leaves, D. Appleton & Co.
The Ocean of Air, Educational Publishing Co.
Frail Children of the Air, Houghton, Mifflin & Co.
Butterflies, Henry Holt & Co.
Inmates of My House and Garden, The Macmillan Co.
Romance of the Insect World, The Macmillan Co.
News from the Birds (Keyser), D. Appleton & Co.
Animal Life in the Sea and on the Land, American Book Co.
Recreations in Botany, Harper & Brothers.
The Stories of the Trees, Thomas Nelson & Sons.
The Fairy-Land of Science, D. Appleton & Co.
A Naturalist's Rambles about Home, D. Appleton & Co.
Animal Memoirs, 2 vols. (Lockwood), American Book Co.
The Population of an Old Pear Tree (E. Van Bruyssel), The Macmillan Co.
Plants and their Children (Dana), American Book Co.
A Reader in Botany (Newell), Ginn & Co.
Short Stories of Our Shy Neighbors, American Book Co.
Sunshine (Amy Johnson), The Macmillan Co.
Natural History in Anecdote, Dodd, Mead & Co.
The Soil (King), The Macmillan Co.
How to Study Plants (Wood), American Book Co.
Four-Footed Americans, The Macmillan Co.
The Great World's Farm, Seeley & Co., London.
The Natural History of Aquatic Insects (Miall), The Macmillan Co.
Philip's Experiments (Trowbridge), D. Appleton & Co.
Birds through an Opera Glass, Houghton, Mifflin & Co.
Madam How and Lady Why (Kingsley), The Macmillan Co.
The Natural History of Selborne (White), Ginn & Co.
Boys and Girls in Biology (Stevenson), D. Appleton & Co.
Glimpses at the Plant World (Berger), Ginn & Co.
Up and Down the Brooks (Bamford), Houghton, Mifflin & Co.
Science Sketches (Jordan), A. C. McClurg & Co.

BOOKS OF GEOGRAPHY AND TRAVEL

Carpenter's *Geographical Reader of North America*, American Book Co.
King's *Geographical Reader*, 6 vols., Lee & Shepard.
Our American Neighbors, Silver, Burdett & Co.
Rupert's *Geographical Reader*, Leach, Shewell & Co.
The Information Readers, 4 vols., Boston School Supply Co.
Great American Industries, 2 vols., A Flanagan.
Ballou's *Footprints of Travel*, Ginn & Co.
Appleton's *General Guide to the United States and Canada*, 2 vols., D. Appleton & Co.
Shaler's *The Story of Our Continent*, Ginn & Co.
Stories of Industry, 2 vols., Educational Publishing Co.
Lakes of North America, Ginn & Co.
Lummis' *A Trip across the Continent*, Chas. Scribner's Sons.
Parkman's *The Oregon Trail*, Little, Brown & Co.
Badlam's *Modern Europe*, Silver, Burdett & Co.

Tarr's *Physical Geography*, The Macmillan Co.
Johonnot's *A Geographical Reader*, American Book Co.
Heilprin's *The Earth and its Story*, Silver, Burdett & Co.
Hutchison's *The Story of the Hills*, The Macmillan Co.
Baedeker's guide-books of Great Britain, the Rhine, etc., Karl Baedeker, Leipzig.
Scribner's *Geographical Reader*, American Book Co.
Ballou's *Footprints of Travel*, Ginn & Co.
Badlam's *Views in Africa*, Silver, Burdett & Co.
Carpenter's *Geographical Reader, Asia*, American Book Co.
Smith's *Life in Asia*, Silver, Burdett & Co.
Australasia and the Islands of the Sea, Silver, Burdett & Co.
Reclus' *The Earth*, Harper & Brothers.

HISTORICAL STORIES, FROM THE FOURTH TO THE EIGHTH GRADE

Stories from the History of Rome, The Macmillan Co.
Story of the Iliad, The Macmillan Co.
Tales from Spencer, The Macmillan Co.
Heroes of Asgard, The Macmillan Co.
Story of the Odyssey, The Macmillan Co.
Tales of Troy, Public School Publishing Co.
Tales from English History, Harper & Brothers.
Ten Boys on the Road from Long Ago, Ginn & Co.
Tales of Chivalry, Harper & Brothers.
Magna Charta Stories, Inter-State Publishing Co., Boston.
Stories of Our Country, American Book Co.
Pioneer History Stories, Public School Publishing Co.
Book of Golden Deeds (Yonge), The Macmillan Co.
Jason's Quest, Leach, Shewell & Sanborn.
Ten Great Events in History, American Book Co.
Ivanhoe, Ginn & Co.
The Making of New England, Chas. Scribner's Sons.
Historical Classic Readings, Effingham Maynard, New York.
The Beginnings of New England, Houghton, Mifflin & Co.
Conspiracy of Pontiac (Parkman's), Little, Brown & Co.
Story of Columbus, Educational Publishing Co.
Odysseus, Chas. Scribner's Sons.
The Story of the Chosen People, American Book Co.
Stories of the Thirteen Colonies, American Book Co.
The Story of the English, American Book Co.
The War of Independence, by John Fiske; Houghton, Mifflin & Co.
Story of Troy, American Book Co.
The Story of Cæsar, American Book Co.
George Washington, Houghton, Mifflin & Co.
The Story of the Romans, American Book Co.
Watch Fires of '76, Lee & Shepard.
Twelve Naval Captains, Chas. Scribner's Sons.
Stories of Great Inventors, Educational Publishing Co.
Fifty Famous Stories Retold, American Book Co.
Stories of Colonial Children, Educational Publishing Co.
The Children's Life of Abraham Lincoln, A. C. McClurg & Co.
Story of Æneas, American Book Co.
Stories of Great Americans for Little Americans, American Book Co.

Children's Stories of American Progress, Chas. Scribner's Sons.
The Boys of '76, Harper & Brothers.
Southey's Life of Nelson, Ginn & Co.; American Book Co.
The Discovery of America, 2 vols., by John Fiske; Houghton, Mifflin & Co.
Old Virginia and her Neighbors, 2 vols., by John Fiske; Houghton, Mifflin & Co.
The American Revolution, 2 vols., by John Fiske; Houghton, Mifflin & Co.
The Critical Period of American History, by John Fiske; Houghton, Mifflin & Co.
Decatur and Somers, D. Appleton & Co.
Westward Ho! The Macmillan Co.
Old Stories of the East, American Book Co.
Macaulay's *Earl of Chatham*, Leach, Shewell & Sanborn.
Macaulay's *Life of Johnson*, Leach, Shewell & Sanborn.
Macaulay's *Lord Clive*, Leach, Shewell & Sanborn.
The Life and Writings of Addison, by Macaulay; American Book Co.

CHARLES A. McMURRY.

The following list of 100 books for high schools is selected by Principal J. C. Hanna, Oak Park, Ill.:

ONE HUNDRED BOOKS OF UNQUALIFIED VALUE FOR HIGH-SCHOOL STUDENTS TO READ

FICTION

1.	*Rab and his Friends*,	Brown	21.	*Last Days of Pompeii*,	Bulwer
2.	*Lorna Doone*,	Blackmore	22.	*Robinson Crusoe*,	Defoe
3.	*Last of the Mohicans*,	Cooper	23.	*Story of a Bad Boy*,	Aldrich
4.	*Tale of Two Cities*,	Dickens	24.	*The Pathfinder*,	Cooper
5.	*The Three Musketeers*,	Dumas	25.	*David Copperfield*,	Dickens
6.	*The Hoosier Schoolmaster*,	Eggleston	26.	*Twenty Years After*,	Dumas
7.	*Silas Marner*,	Eliot	27.	*Micah Clarke*,	Doyle
8.	*Pilgrim's Progress*,	Bunyan	28.	*Kenilworth*,	Scott
9.	*The Man Without a Country*,	Hale	29.	*Waverley*,	Scott
10.	*The House of Seven Gables*,	Hawthorne	30.	*Gulliver's Travels*,	Swift
11.	*Tom Brown's School Days*,	Hughes	31.	*Vanity Fair*,	Thackeray
12.	*Les Miserables*,	Hugo	32.	*Henry Esmond*,	Thackeray
13.	*Westward Ho!*	Kingsley	33.	*Cloister and Hearth*,	Reade
14.	*Hugh Wynne, Free Quaker*,	Mitchell	34.	*Scottish Chiefs*,	Porter
15.	*Treasure Island*,	Stevenson	35.	*Hypatia*,	Kingsley
16.	*Ivanhoe*,	Scott	36.	*Soldiers Three*,	Kipling
17.	*Quentin Durward*,	Scott	37.	*Kidnapped*,	Stevenson
18.	*Uncle Tom's Cabin*,	Stowe	38.	*The Talisman*,	Scott
19.	*Ben-Hur*,	Wallace	39.	*The Emperor*,	Ebers
20.	*Harold*,	Bulwer	40.	*Schönberg Cotta Family*.	

ESSAYS, ETC.

1.	*Autocrat of the Breakfast Table*,	Holmes	6.	*Essay on Burns*,	Carlyle
2.	*Sketch Book*,	Irving	7.	*Earth and Man*,	Guyot
3.	*Essay on Milton*,	Macaulay	8.	*The Book of the Ocean*,	Ingersoll
4.	*Being a Boy*,	Warner	9.	*Sir Roger de Coverley Papers*,	Addison
5.	*Birds and Bees*,	Burroughs			

POETRY

1.	*Evangeline*,	Longfellow	3.	*Snow Bound*,	Whittier
2.	*Vision of Sir Launfal*,	Lowell	4.	*Tent on the Beach*,	Whittier

5. *Selected Poems*, Burns
6. *Childe Harold*, Byron
7. *Ancient Mariner*, Coleridge
8. *Elegy in a Country Churchyard*, Gray
9. *Lays of Ancient Rome*, Macaulay
10. *Lycidas*, Milton
11. *L'Allegro*, Milton
12. *Il Penseroso*, Milton
13. *Lady of the Lake*, Scott
14. *Marmion*, Scott
15. *Merchant of Venice*, Shakespeare
16. *Julius Cæsar*, Shakespeare
17. *Macbeth*, Shakespeare
18. *As You Like It*, Shakespeare
19. *Princess*, Tennyson
20. *Idylls of the King*, Tennyson

MISCELLANEOUS

1. *The Gold Bug and Other Tales*, Poe
2. *Stories from Homer*, Church
3. *Stories from Virgil*, Church
4. *Prose Translation of Odyssey*, Butcher and Lang
5. *Classic Myths in English Literature*, Gayley
6. *Old Times on the Mississippi*, M. Twain
7. *Curious Myths of the Middle Ages*, Baring-Gould
8. *Two Years before the Mast*, Dana
9. *Wonder Book*, Hawthorne
10. *Tanglewood Tales*, Hawthorne
11. *Jungle Books*, 2 vols., Kipling
12. *The Story of Primitive Man*, Clodd
13. *The Story of the Plants*, Grant Allen
14. *Homer* [Princes of Literature], Gladstone
15. *Books and Reading*, Porter
16. *The Story of the Cowboy*, Hough
17. *The Story of the Mine*, Shinn
18. *The Story of the Indian*, Grinnell
19. *The Story of the Railroad*, Warman

(Story of the West series)

20. *Citizen Bird*, Wright and Cones
21. *Brave Little Holland and What She Taught Us*, Griffis
22. *How Marcus Whitman Saved Oregon*, Nixon
23. *Society in Rome under the Cæsars*, Inge
24. *Stories from Herodotus*, Church

BIOGRAPHY

1. *Autobiography*, Franklin
2. *Life of Nelson*, Southey
3. *Cæsar; a Sketch*, Froude
4. *Hero Tales from American History*, Lodge and Roosevelt
5. *Christopher Columbus*, C. K. Adams [From Heroes of the Nations series]
6. *Nelson and the Name Supremacy of England*, W. Clark Russell
7. *Pericles and the Golden Age of Athens*, C. R. L. Fletcher
8. *Theodoric the Goth, the Barbarian Champion of Civilization*, Hodgkin
9. *Julius Cæsar and the Organization of the Roman Empire*, W. Warde Fowler
10. *Napoleon, Warrior and Ruler; and the Military Supremacy of Revolutionary France*, W. O'Connor Morris
11. *Jeanne d'Arc, the Maid of France*, Mrs. Oliphant
12. *George Washington; an Historical Biography*, Scudder
13. *Lives of Eminent Men*, Plutarch [Makers of America series]
14. *Oglethorpe and the Founding of the Georgia Colony*, Bruce
15. *Alexander Hamilton*, W. G. Sumner
16. *Robert Morris*, W. G. Sumner
17. *Thomas Jefferson*, Schouler
18. *Robert Burns*, Carlyle

SPEECHES

1. *Speech on Conciliation*, Burke
2. *First Bunker Hill Oration*, Webster
3. *Reply to Hayne*, Webster
4. *Gettysburg Speech*, Lincoln

TRAVEL, DESCRIPTION

1. *Alhambra*, Irving
2. *Views Afoot*, Taylor
3. *Tales of a Traveler*, Irving
4. *From Lakes of Killarney to the Golden Horn*, H. M. Field
5. *From Egypt to Japan*, H. M. Field

SUMMARY

Fiction	40	
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Poetry	20	
Miscellaneous	24	
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V. REPORT OF THE SUBCOMMITTEE ON RELATION OF LIBRARIES TO NORMAL SCHOOLS

RELATION OF THE LIBRARY TO THE PUPIL TEACHER

The Subcommittee on Normal Schools and Libraries briefly considers the problem from three points of view: (1) What book equipment has the pupil teacher a right to demand of the normal school? (2) What is the relation of the library to that demand? (3) How far are the normal schools realizing their opportunity?

Since young men and women enroll in normal schools for the purpose of making adequate preparation for the profession of teaching, it seems that the least the institution should do is: first, to train them so to discipline their own mind as to make all its functions in the highest degree serviceable to themselves; second, to help them to acquire such a fund of knowledge as will make them wise guides for the children; third, to give them such an understanding of the human mind as will enable them to train wisely the children committed to their care; and, fourth, to give them such an acquaintance with books as shall enable them to know and choose the best for the child, and to train it how to use the contents to greatest advantage. The importance of the first two has been realized from the first; the third now engages attention; but the fourth is comparatively a new field. What can the normal schools furnish in the way of book and library equipment, and what is being done?

The student enrolls in the normal school in a double sense: he is there to develop his own capacity, and thoroly to furnish himself unto the great work of teaching. The first involves academic training similar to that offered in other institutions of liberal culture, and calls for a similar use of books; the second asks an equipment for the profession of teaching, and demands a culture in books otherwise less needful. All students require training in thoro, comprehensive research, but the pupil teacher must enter upon it with the idea of becoming an *index rerum* for his future schoolroom, and of learning to correlate whatever can be mutually related. Personal conviction and class-room stimulus will avail little unless the library be there to do its part. In an academy one may perhaps be satisfied to study Virgil with a lexicon and a work on mythology; but the normal student can to advantage turn to parallel passages

in the play of *Hecuba* and the tragedy of *Agamemnon*, or read Longfellow's *Enceladus*, Tennyson's *Œnone*, Wordsworth's *Laodamia*. The student of science in an academy may be satisfied to do laboratory and field work, but the pupil teacher must learn to correlate his work in biology with the nature element in literature, or his pupils may not go from Burroughs and Thoreau and Ernest Ingersoll to field and forest and laboratory. The college boy may rest satisfied with *In Memoriam* as an elegiac poem, but some day the pupil teacher will need to associate it with Emerson's *Essay on Friendship*, Trumbull's *Friendship the Master Passion*, or the story of *David and Jonathan*, in order to teach the sacredness of human friendship. No history of education in the United States is comparable to that made by the student himself in a small, well-selected, professional library. In a normal school worthy of the name, text-books can be little more than inspirations and suggestions for personal, independent work in library, or laboratory, or afield. The teacher himself must *be* before he knows how to train being.

Again, he who has, as sole capital for his profession, a life certificate to teach in the common schools of the state is "poor indeed." Given a natural aptitude for teaching, instinct should prompt him to study his own personality with reference to his educative power. One may need myths and folk-lore, songs and exercises, poems and pictures; the library is her only possibility. The little white schoolhouse on the prairies of the West or in the pineries of the North may demand of another an accurate knowledge and speedy recognition of bird and beetle, moth and butterfly, or a rich supply of mechanical devices; the library should richly supplement museum and laboratory. There, cataloged, indexed, and easily accessible, should be found, not in single copies alone, but sometimes in duplicate sets, whatever will increase his efficiency and promote the interests of the community.

Nor is it sufficient for the library to furnish the student what he needs as a teacher; it must, as well, enable him to satisfy the child whom he is to educate. It is no longer safe for a young man or woman who expects to teach to put off acquiring a general knowledge of books until after the professional training is over. The American boy and girl will read, and, next to the intelligent parent, teachers have the best opportunity for wise guiding. Let the normal library be rich in literature for children, and it will not be long before instructors will see to it that teachers are correlating work for their own enrichment with literature that will be attractive to their pupils. Books satisfy one craving only to create a fresh one. The judicious teacher who arrested the attention of an idle, pugnacious little fellow with stories of Greek heroes little realized that she was turning the tides of destiny and making him an honor man in college Greek. The one who placed a copy of Burns' poems in a boy's hand little realized that thus the Quaker lad would find his own poetic

instinct. A book on birds in the hand of a child made one man an ornithologist of no mean note. How many more the world might have had, if children had been given proper literature, we shall never know, but it will be criminal in the future to mar such a possibility. In several states, normal schools not only are placing such literature on their shelves and making use of it in class-rooms, but their pupils in the field are establishing schoolroom or village libraries, and in large measure duplicating what they found on the shelves where they were taught. And this is as it should be. If the people look to normal schools for trained teachers, then they have a right to demand that these teachers come to them prepared to name the best books, and to use them in the best way after they are purchased. "No teacher, worthy of the name, should rest satisfied until, having chosen a book for a child with as much care as a physician would use in selecting his instruments, he sees that child as an interested and successful reader of the same."

Thus far we have considered the possibilities of the library as it has direct bearing on the pupil teacher and the book problem of the future schoolroom. Has the student himself, by virtue of being a student, any rights which the library is bound to respect? The teaching profession was the last to feel that it needed a training school of its own, and the last to appreciate the necessity for a literature distinctly professional. The universities early recognized the necessity for schools of law, medicine, and theology, and that upon the libraries of professional literature connected therewith depended student efficiency. Not until the first normal schools were established in the United States was teaching recognized as in any true sense professional in character. An education more or less general was deemed ample qualification. That normal schools have successfully demonstrated that teaching is a profession and demands a professional literature is evidenced from two facts: first, that a university can no longer hold its title in fee simple without establishing a department of pedagogy; and, second, that all thinkers are studying the problems of education both from the historical and philosophical points of view, and giving to the profession the results of their ripened conviction or of their patient investigation. Thus there is a rapidly growing didactic literature that no normal school can afford to be without.

The sections of the library devoted to child study, psychology, history of education, and other strictly professional subjects, should be full and complete. It were far better that in a normal school less be expended on laboratory and museum, and more upon these departments of the library. The teacher can be taught to manufacture much of his own apparatus and to make his own museum, but how shall he train the child aright if he do not know the evolution of the race, the history of its educational development, and the growth of the human mind? Teaching is so recent a science that its history cannot yet be written with any fullness;

hence normal libraries should become storehouses, in which is being gathered together whatever will supplement text-books and enable pupil teachers to pursue independent investigation. Nor should the professional side of academic studies be neglected. It may be just as necessary for some future teacher to look up the origin, growth, and decay of the gender idea of nouns as to trace the rise and growth of political parties. Too long have normal libraries been purely academic in character. It is high time for them to become professional as well. The normal school is called upon to do professional work, and to the end that its pupils may have every advantage to know the history and philosophy of their own profession, and that the instructors in it may be able in turn to contribute the results of their own scholarship applied to the problems of the age, the library should lay the world under tribute for whatever will enrich their field of inquiry and constitute their field of authority. The generosity which the states so unanimously show to their great universities will in time be extended also to the normal schools. It cannot come too soon, if the common schools, for which the normal school exists, are to remain the lines of fortification for the republic and preserve the integrity of the nation.

Lastly, since the students are here in the capacity of pupil teachers, they and their constituency have a right to demand of the library a favorable opportunity to study child life in literature. Every well-equipped normal school has its model training department, serving the double purpose of enabling its students to teach under the watchful eye of a competent critic and to study the unfolding life of the child. It is here that they begin to realize that theirs is not to teach books, but to educate; that streams of impulse are to flow into and become character; that a satisfactory and happy future is conditioned upon a good today. Nevertheless is it true that the child is isolated from the world of environment in which he is destined to live. Each little child is to pass from this isolation and seclusion to determine its own relation to environment; yea, more, to adjust itself to its former companions in the schoolroom, now also transformed by changed conditions into a force new and, to some extent, incomprehensible. The thoughtful man and earnest maiden will scarcely be contented to let the legal requirement suffice for the study of the child. They should have the opportunity to turn to literature, where the life-blood of the race spirit pulses warm and free. It is interesting to watch the novice call the attention of the child to the world outside,

> "The beauty and the wonder and the power,
> The shapes of things, their colors, lights, and shades,
> Changes, surprises,"

and hear her say: "God made it all." But it is impressive, when she turns to literature, to watch the child in the realm of activity, to study

how and by what its life is being shaped, to be thankful that even a child may lead from tumult into peace, and from sin unto righteousness.

This is, and should be, the function of the library in a school where teachers are trained to serve the state by educating its future citizens.

LIBRARY EQUIPMENT AND ORGANIZATION

One of the serious problems in any educational institution must be the equipment and organization of its library, and this is peculiarly true where self-culture and professional training are to be secured at the same time. The library of a normal school cannot afford to ignore a student's right to efficient service, because, directly and indirectly, it thus influences the entire state. Whatever of advantage the student derives from a well-arranged library, whatever he may learn of library methods, is quite likely to be of benefit to the community where he teaches. From the beginning, books should be classified according to one of the best systems in general use, and, if possible, like the one at the state university, so that, from cross-roads to campus, library usage may be easy.

Whether the books be in charge of an untrained librarian or of a member of the faculty, it is not impossible to arrange books and shelves by system, and train students to preserve the classification. Author and title catalogs can be made in harmony with the chosen system, and when five hundred volumes are on the accession list, an expert cataloger is needed, to double the efficiency of the library. Often the portions of a book most valuable to a student are suggested neither in the title nor in the table of contents; as, for example, the home of Napoleon Bonaparte on the island of St. Helena described in one of the consular reports, or some of the interesting facts of educational history treasured in the reports of the Bureau of Education published in the seventies and eighties. An expert cataloger may seem a heavy expense for a small library, but the smaller the collection of books, the more necessity for using them to their fullest extent. A library expert interested in educational matters is practically an assistant in every department of instruction. She makes herself acquainted with the curriculum and familiar with the lines of work pursued in the several departments; anticipates class-room requirements, and is ready to meet them; is able to take students in groups, and, by timely talks, not only to increase their library knowledge, but help them to understand a book. A country lad, after fifteen minutes with such an expert, said recently: "That talk with Miss R. was worth more to me than a term's work with any professor. I know how to take hold of a book now and get some good out of it." Experience strengthens the belief that a scientifically trained librarian is invaluable in a normal school, and more to be desired than large accessions of books without a complete catalog. In an ideal normal school, senior pupils will have opportunities

to assist the librarian in this work and thus become familiar to some extent with the methods of interesting students in good literature.

Each year periodical literature becomes more valuable. This is evident, whether we consider the price that must be paid for the earlier volumes of any leading magazine, if perchance they are even in market, or whether we consider the articles that appear in the current month. No teacher can afford to live behind his age, and to do otherwise requires a generous supply of current periodical literature. Notably is this true of whatever is professional in character. Any magazine worthy the attention of a student in normal schools is worthy of preservation in permanent form. Barnard's *Journal of Education* was long ago out of market, and the earlier numbers of the *Child-Study Monthly* are practically beyond the reach of the many normal schools that failed to order them when current. Too much emphasis cannot be laid upon the necessity of buying and binding periodical literature.

Poole's *Index*, and kindred publications, unlock this mine of wealth, and yet students often regret that the subject catalog does not include magazine articles. In the study of the library problems this member of the committee has been led to believe that some portion of the student body in a normal school should be allowed to make such a catalog for magazine articles. It need not, and should not, be a part of the regular catalog, but, in a case exclusively its own, be an integral part of the library equipment. It will serve two purposes: aid the new student to make more effective research, and enable one further advanced to acquire some skill in bringing out subject-matter by topics, thus training him to be an efficient helper in schools where an expert librarian is not an immediate possibility.

One of the best sections of the library should be devoted to public documents, both state and national. Here earnest workers will be found turning the pages of geological surveys for land slopes and scale of foot hills, for identification of birds and insects, for descriptions of rare plants and native flora. Government reports are an inviting field for workers in sociology, political economy, history, and finance. Reports of the Bureau of Education, from the first volume to the present, furnish much that the student of the history of education cannot find elsewhere. Census reports offer a comparative study of no mean value, and throw light upon many a knotty question in debate. *The Growth of Industrial Art*, a public document, is good supplementary reading for a class in history of art, and *Records of the Civil War* is the raw material out of which the new philosophy of history will fashion many a chapter. What is true of government reports is equally true of state documents. Where should they be found, if not in normal schools, where is forged the anchor of our ship of state? One institution is gathering extra volumes of the National Educational Association reports. Of the last issue alone

several copies are on the library shelves, while three or four times as many are stored in the packing-room for future need.

This is pre-eminently the age of associations. Men of wide culture and similar tastes group together for the purposes of scientific investigation, historical research, or a study of the problems of the age. The results of their labors are published as monographs; yet, from the reports received by this committee, it is evident that few normal schools are enriching their libraries with such accessions. Where shall we look for the *Herbartian Yearbook*, if not in the library of a state normal school? Where may we expect to find the publications of the American Historical Society, and others of like nature, if not where pupil teachers most do congregate? To the meagerness of legislative appropriation is doubtless due this state of affairs. Whatever the cause, is there not some remedy? The nation fosters education. Her school system is at once her pride and the source of her strength. For its maintenance she has made liberal grants. The states, on the whole, are generous. If they are not beneficent toward normal schools, it is because they have not seen the necessity; and who shall make the need known, if not the schools where teachers are in training for city, village, yea, and country districts? Some of the largest libraries in these professional schools have charged students a small fee, and thus materially advanced library interests. Where the libraries are small, and the appropriations correspondingly meager, a revenue in some way from the student body itself seems the only other method. Successful in some states, why not in all?

The strictly professional side of a normal-school library cannot be too strongly urged. A knowledge of United States history is deemed a necessary requisite for intelligent citizenship. Much more is it essential that he who is to train the child for future sovereignty in a republic should himself be familiar with the rise and development of great educational movements, know the men who were able to inaugurate them, the methods of attaining success, and in what way these same educational movements have shaped the history of great peoples. Whatever can be made to throw any light on the development of mind, or the formation of character, should be the student's to enjoy. The memorizing of a text-book on psychology or ethics may have good disciplinary value, and be serviceable as a nucleus around which to grow, but the evolution of the skilled teacher, able to build brain without weakening it, and form character without marring it, is the product of the library rather than the class-room. The survival of the fittest may be all right in the physical world, but human life costs too much, and is worth too much, to be sifted by any selective process. Mind-endowed creations cannot be thus rudely handled, or even left to their own inherent tendency to gruntle or decay. The new gospel calls any human life

sacred and asks the teacher to cherish it, strengthen it, fit it for enjoyment of life and for usefulness to society. This gospel demands a reverent and responsible study of the child; but before the teacher may safely undertake this study of the living child, and the shaping of child destiny, there ought to be most faithful work in the library, to determine what is a normal or an abnormal child, the possibilities of the one, the impediments to the progress of the other; what builds, what mars. In no department of pedagogical work is there more promise of success than in this, nor one that offers a finer culture. The literature on the subject is so rich, both in facts offered and in the culture possible therefrom, that ample provision should be made in every normal-school library for thoro and exhaustive study of the same, not alone on the historical and scientific side, but also in the realm of literature. There may be a question as to how far a normal school should furnish so-called culture literature in duplicate sets for pupil teachers, and thus free them from the necessity of beginning a library for themselves; but there can be no question as to the duty of filling the child-study alcoves with whatever will help to the thoro understanding of the processes of human development, and in sufficient quantities so that each pupil teacher may work unhampered. It is interesting to watch the student go from the text-book on the *Study of the Child* to the well-filled shelves in the pedagogical department of the library; from there to the cases of general literature for the books in which child life figures; from there to the cases devoted to juvenile literature, where he may satisfy himself as to what a child should read; and then to the child himself. Two incidents have come under my own observation during the preparation of this report. Some young men were playing games with a group of little children at twilight, when a teacher passed by, saying: "What a merry time you children are having!" One of the young men promptly answered: "We are studying the children without their knowing it." Another day a thoughtful young man who had always seemed more interested in books and facts and things than in human life, said: "I am longing to enter the professional year. I want to begin the study of the child. I cannot pass one on the street without saying to myself, 'Little mystery, I wish I understood you!'" These are evidences of the growing interest in child study where a library creates a desire for the study.

Finally, is it too much to say that professional training of teachers has reached that period in its development where the library must be one of the chief factors in the training of pupil teachers; that the instructor, worthy of the chair he occupies, must be familiar, not only with the books and service of his own department, but familiar as well with whatever the pupil teacher must use along kindred lines in his own schoolroom, and be able to help to correlate the work of his own department with that which the pupil is deriving from every other department as well; that

the librarian must be a member of the faculty, as much as the teacher of mathematics or psychology, in order to understand the curriculum and be able to supplement class-room instruction with library investigation?

Is it too much to say that we cannot hope to make pupil teachers intelligent readers of books, able to grasp the content of paragraph and chapter, estimate them at their true value, and correlate them with knowledge previously acquired, unless we release them from the old-time enslavement to text-books and grant them the freedom of the modern library? Is it too much to say that the library is not now holding its true place in the training of pupil teachers? Is not Carlyle right when he says, "The true university in these days is a collection of books;" and may I not add that the ideal normal school is to regard text-books as mere signboards, teachers only as wise guides; while the library and training school are the true realm where the pupil of today, thru a process of evolution, is to become the teacher of tomorrow?

SUMMARY OF REPORTS RECEIVED FROM STATE NORMAL SCHOOLS

The Subcommittee on the Relation of Normal Schools and Libraries mailed circular letters to each normal school, state and private, listed in the last published report of the Bureau of Education. Reports have been received from about three-fourths of the schools. A number of these, owing to "pressure of work," were not returned until late in May or early in June, and, therefore, are not fully embodied in this summary. The letters sent out were designed to secure information in regard to the equipment and management of libraries; to ascertain what normal schools are doing, not only to create an interest in literary culture, but an acquaintance with literature; and how far it is expedient to teach library science. The following summary is the result of that investigation:

The reports received from private normal schools are few and often incomplete; hence they are not embodied in this report.

The State Normal School at Terre Haute, Ind., reports 25,000 volumes, the largest normal-school library in the United States. Three schools have libraries of 15,000 volumes; six have 10,000; eighteen have about 5,000; nineteen have, in round numbers, 2,000; four have about 1,000 volumes.

So far as heard from, no state normal school is without some library advantages, altho many have less than 1,000 volumes. The presidents of two of the more recently established schools have generously placed their private libraries in the normal building, and given students free access thereto; in another the professor of psychology turns over to student use his valuable private library, and in the same institution the educational reports in English, French, and German, so necessary to a student of didactics, are the loan of a public-spirited man. The regular library of this school in cultured New England is 3,500 volumes. What has not the self-sacrificing missionary spirit of New England done for school as well as church!

The libraries of these schools are supported in the main by legislative appropriations. In a few instances a regular fee is charged, varying from fifty cents per term to two dollars (Terre Haute) per annum. The senior class in one school makes a generous annual gift to the library, and this amount is expended for books; in another a graduation fee is charged, and this goes to the support of the library. As a general rule, books are selected either by heads of departments or by a committee chosen from the faculty. In

most instances the funds are under the control of the general office, and library bills are paid there; but in thirteen of the schools the library committee is directly responsible for the funds and makes report to the general office.

Only eighteen schools expend any portion of the appropriation for periodicals and newspapers. This amount varies from 2 per cent. in one school to one-half of the appropriation in another. The average seems to be from 8 to 10 per cent. of the legislative appropriation. The rest of the institutions, so far as they have a magazine library, secure it by voluntary contributions from the students, or by small fees charged for the purpose. A few libraries take a large number of periodicals, including all, or nearly all, magazines devoted to science or philosophy, didactics or current literature, and, when bound, make them a part of their general library. It is a matter of regret that the number is not larger, and that even of those who place a generous supply of magazines on the reading tables so few bind any number of them at the end of the year. The following is significant:

TABLE SHOWING THE NUMBER OF LIBRARIES THAT BIND THE LEADING PERIODICALS[1]

American Journal of Psychology	8
Atlantic Monthly	18
Century	30
Child-Study Monthly	11
Cosmopolitan	18
Educator	8
Educational Review	25
Forum	28
Harper's Magazine	26
Journal of Education	9
Journal of Pedagogy	3
North American Review	22
Pedagogical Seminary	14
Primary School Monthly	25
Primary Teacher	8
Review of Reviews	20
School Journal	9
Scientific American	9
Scribner's Magazine	22
Teachers' Institute	6

Twenty-four schools out of fifty reporting on this topic have copies of the text-books in general use in the state; thirty-two out of forty-two reporting purchase duplicate sets of books needed for special research or study in the several departments; twenty out of forty-six aim, either by lectures or class instruction, to give pupils some idea of catalog-making; five have a short course in bibliography; twelve give instruction in what is called the methods class; twelve leave this to the classes in rhetoric or literature; twenty-two librarians make it their duty to prepare lists of "sources of information" on various topics; thirteen are glad to have the seniors work with them in the library and do give them a training of no slight value; seventeen schools so arrange library matters that the alumni have the use of new books, and thus are helped to keep abreast of the times; fifty-three schools permit pupils to take books home for reading or study; and forty-seven allow them to visit the shelves for research and study.

There is a general conviction that, since the state does so much for students, and since the supply of books on the shelves of the library is inadequate to the demand, students should be charged a small library fee. It is little for the student, but it means much to the library.

[1] No notice taken of less than three libraries binding the same magazines.

It is safe to say that comparatively few libraries have, as yet, been able to make a scientific classification of books, and in one instance, at least, volumes already purchased cannot be used in daily study for lack of a room for library cases.

This summary is necessarily crude and imperfect, because reports were received at a date too late for proper treatment. The subject of libraries in relation to educational institutions is so important — and particularly is this true in relation to normal schools, colleges, and universities — that the wish is here expressed that the work begun this year by the Council may be continued for one or more years, until a report worthy of this great department of education shall be within reach of every such institution of learning in the republic.

M. LOUISE JONES.

VI. ESTABLISHING LIBRARIES IN VILLAGES

Any village can secure and support a free public library, when the people fully understand the value of such an institution. The first step, therefore, toward securing such a library is to convince the people that libraries are an essential part of a system of education. It is equally important to show them a practicable plan for maintaining a library at a reasonable expense.

A public library should be as much a public institution as the public school, and should be maintained by the public for the same reasons, tho experience has proved that the two institutions usually thrive better under separate boards working in harmony.

Persons who desire to establish a local library should first study the laws of their state regarding libraries. Fourteen states have state library commissions which have authority to aid in organizing public libraries by means of letters and pamphlets, or by sending their officers. Such bodies can give the most effective help, and every state should have one. Any one of these commissions will usually send helpful literature to persons in other states than their own. Twenty states have state library associations which desire to aid new libraries, and the American Library Association can also give help. (For the addresses of the executive officers of these bodies see Appendix.) A pamphlet entitled *Statistics of Libraries and Library Legislation in the United States* can be obtained without cost from the United States Bureau of Education at Washington, D. C.

In states which have neither library commissions nor associations, information and suggestions can usually be obtained from librarians in the large cities. The personal counsel of experienced librarians who have some general idea of the local conditions should be obtained, if possible. When the leaders in the local movement have settled upon a practicable plan for establishing and supporting a library, they should educate public sentiment thru the local press, from the platform, and by private appeals. Include in the canvass all citizens, irrespective of creed, business, or politics. To ignore any class is to imply its indifference to

education and to invite its hostility. To assume that a man from the uneducated classes, or a local politician, is interested in any movement for the public good is a great aid in getting his sympathy and active help.

Enlist the support of the business-men who are interested in advertising the town. Show them what other places are doing, and arouse their civic pride. If you can get an agreement by the village board to pay the running expenses of the library, provided the citizens will equip it, organize a movement to raise a suitable sum of money. When you can convince your business-men that, if a library is started, it can be permanently maintained, they will often contribute cheerfully to get a large collection of books, when they would not give anything for a small one. Start with the largest gifts of money that you can get. Let money come later from entertainments. Do not start your enterprise with gifts of books. If books are taken, let it be after all the money possible has been raised. A healthy old library can endure gifts of discarded books, but new libraries are often imperiled by them.

It is generally advisable, before canvassing for funds, to find what the running expenses of a library will amount to—how much it will cost for rent, librarian's salary, fuel, light, and printing. If possible, make an itemized statement of what the expenses will be. Many people have an exaggerated idea of the cost of a library, and fear heavier taxes than are necessary.

If you canvass the town, make the canvass so close as to include every family. Have all factions represented on the canvassing committee. Everyone who gives will feel a stronger interest in the library. As a rule, the libraries which are the result of united effort do better work, in their early years, than those which are founded and entirely supported by individuals.

All the newspaper articles about libraries, and all the arguments in public and private, should assume that the library will be primarily intended to benefit the children. This will make it easier, when the time comes, to get a good librarian and to get the right books and liberal rules.

The library board should include the person who is at the head of the local school system, two or three who have acknowledged business sagacity, and others who have literary knowledge. Women should, of course, be among the number.

If possible, get a trained librarian to help you in organizing. If you cannot get one to visit you, write to him or visit him. There is a world of helpful library experience for those who insist upon getting help from it.

The local librarian should, if practicable, be early chosen, so that she may aid in selecting the books and organizing the library. The usefulness and ultimate success of the library will largely depend upon her

ability and zeal. She must have force, tact, and the "library spirit." She must have the power as well as the desire to interest and help the children. An article in the *Library Journal* (April, 1899), by Clara W. Hunt, of Newark, N. J., describing the work that should be done by the librarian of a children's library in a large city, applies with equal force to the person in sole charge of a library in a small community. Miss Hunt says:

> When all has been said and done about devices, and schemes, and baits, there is nothing that will take the place of, or count for as much as, personal contact of librarian and children. If the librarian is an honest lover of children, and if she knows their books, not simply from the lists, but from actually reading them, she can do a thousand times more for the boys and girls than all the bulletins, catalogs, bright covers, and every other material device put together. If she is all this, and much more, she will be interested in every individual child that comes into her room. She will remember their likes and dislikes; she will make every child feel that she is a friend, and yet never let them suspect that she is interfering with their choice of books; she will confide in the children and win their help and confidence; she will use her specially intelligent boys and girls as a sort of book committee to help her decide on what books the children will like; she will interest the children in keeping the room supplied with wild flowers and other treasures of the woods; and some day, when she is particularly busy, she will help more people than suspect it, by getting one of the older girls to read to the little ones who are growing too noisy over in their corner. She will have a mind above caring about the fiction per cent. in her room, believing that it is a higher aim to help the boys and girls to be *good* than to be merely wise, and knowing that the child's character is more strongly influenced by the ideals of his dear story-book friends than by Gradgrind facts.
>
> One cannot lay down definite rules under this head of personal work, but by means of it the children's room and library may become a synonym for everything that is beautiful and helpful and uplifting to the child — a second home from which the boys and girls go out with enthusiastic interest in the world about them, with more than the germs of a taste for history, or poetry, or biography, with the reading habit formed, and the consciousness deeply rooted in their minds that books may always be their friends and teachers; with a distaste, it is hoped, for weak, trashy books; but, above all, with higher ideals of manhood and womanhood, and with aspirations to be brave and honest and pure, like the lifelong friends who have come to them through that dear medium, the book.

The village library and librarian should do for the children from sordid homes what the home library and the cultivated father and mother do for the children from refined homes. They should train the children to love good books, to appreciate all their beauties, to handle them carefully, to talk about them, to be fit companions for genuine book-lovers, and to go to books habitually and instinctively for pleasure in idle hours, and for comfort and strength in times of stress.

No paid stipendiary, no woman who is merely negatively good, can do this work; but a woman with soul and tact, who feels the responsibility and charm of her work, will grow under it until she becomes a living force in the hearts of her children and in the homes of the community.

SELECTING THE BOOKS

In selecting the books, get the advice of experienced librarians of public and school libraries. Some excellent annotated "lists of books"

have been made by competent persons, and the titles of a number of these will be found in the Appendix.

The first books purchased for a library should include a large proportion for children; because the most enduring and effective work can be done for the children, and because the best books for children are enjoyed by everybody. When the children's classics have been read in the homes, and the parents feel that the books are helping their children to become better, more intelligent, the library has won a place in the public heart which will insure its permanent support.

The first books purchased must be wholesome, but they must also be interesting to untrained readers. The test of experience must be applied to these books. Choose those that librarians of good judgment agree are deservedly popular. Fortunately there are a few hundred of such books. Many of these are standard and can be bought at low prices in durable editions. The first purchase may include books of far greater average merit than any subsequent purchase. As far as the average reader is concerned, the best five hundred popular books are worth all the rest. Do not put too much money in historical sets or bulky biographies and scientific and reference-books. With untrained readers the habit of reading for pleasure must precede the habit of studying. Watch the reading of your patrons, and when you find that they are beginning to study, buy along the lines of their interest. Do not use all of your money for books at first, but save some to get a few new books occasionally, when you know more of the tastes of the readers. Frequent purchases of books keep up the interest in the library.

In preparing your list for the book-dealer describe the editions of the standard books which you wish. It is usually best to get bids from a number of dealers. A reliable bookseller can frequently help you in selecting the best editions for your purpose. Do not waste money in the purchase of expensive sets or bulky compilations from agents.

PREPARING BOOKS FOR THE SHELVES AND CHARGING

The work of classifying and cataloging the books and providing a system of loaning them belongs generally to the librarian, and needs a preparation that should be obtained either by personal instruction in a well-managed library, in a library training school, or by the study of some of the excellent manuals prepared by trained and competent librarians.

MISCELLANEOUS

In the purchase of fittings and supplies, in the making of rules for the management of the library, in the making of by-laws for the government of the library board, and in considering the many questions of library management, appeal should be taken to the experience of librarians as given in the handbooks and pamphlets referred to elsewhere

in this report. The rules for the management of the library should be as simple as possible, and should be designed to secure the fullest and best use of the library by the individual which is consistent with the rights of the public. The books of the library should be loaned, without charge, to persons of all ages who will obey reasonable rules, and all people should be made to feel that they are joint owners in the library. As fast as possible, all borrowers should be trained to select their books from the shelves, under proper guidance. Special assistance and help should be given to schools and teachers, and there should be no bars of any kind between the people and the books that may safely be removed. Librarians with the right spirit and tact find it possible in most communities to train the children and the older people to "browse" among the books, to keep them clean and neat, and to be orderly and thoughtful of the rights of others. Children especially should be systematically taught to handle books carefully and lovingly, and the best time to do this is when the books are new. The volumes of a public library should not need paper covers.

THE READING-ROOM

Shall we establish a reading-room in connection with the library? This question is often a most perplexing one. The usefulness of a good, well-managed reading-room in connection with a public library cannot be fairly questioned, if the experience of the best of these rooms is taken as a guide. A reading-room without proper supervision may become a public nuisance.

When a community can maintain a good library and a good reading-room, it should do so, but the library is of more worth than the reading-room, and a good library should not be injured to maintain a poor reading-room. A boy ought to spend his evenings in reading rather than in idleness, but if he has a good book, the best evening reading-room is that which contains his mother.

In its early days the library may often meet the most urgent needs of a small town if it is open but two or three times each week, and the money saved from shortening the time required of the librarian and the saving in light and fuel can be used for books, when the collection is small. With a reading-room the temptation to draw upon the scanty book fund for money for periodicals and more "open days" is very strong. When a good collection of books has been secured, and the library has gained a secure place in the public regard, the reading-room will be wanted, and will get adequate support without crippling the library.

GIFTS FOR LIBRARIES

It is becoming more and more popular for people of wealth to contribute liberally to build beautiful library buildings or to provide endowments for libraries. Such gifts bless those who give and those who

receive, but when the hope of such private gifts leads the community to delay establishing public libraries, the hope may be a curse. The best way to get large gifts is to make good use of small ones. Many a wealthy man has only a vague idea of the wide usefulness of a library, but when he has seen one at work in his own community, there comes a growing appreciation of its work and a desire to help it. The best way to learn to manage a large library wisely is to manage a small one. When all the people of a community have made a united struggle and many sacrifices to found a library, a large gift or gifts will give them a delight and a feeling of personal gain that will not follow a gift in which they have no share. Do not wait for large gifts. If you do your duty, help and growth will come in due time.

F. A. Hutchins.

VII. SECURING LIBRARIES FOR RURAL SCHOOLS

In January of the present year a subcommittee of the Committee on Libraries and Schools sent out a circular to leading teachers in each state, asking information as to the number, size, and use of libraries in the rural schools. The replies show that, in the great majority of the states, few rural schools have adequate libraries, with a due proportion of books for the smaller children. In a few states — California, Montana, Minnesota, Wisconsin, Michigan, New York, and New Jersey among others — the money to purchase rural school libraries has been partly or wholly provided by the state, but in the great majority of our states the money has been obtained by appropriations by school boards, gifts, entertainments, or public subscriptions.

In states where the laws require the purchase of suitable school libraries the state departments of education furnish lists of the best books and often aid in training teachers to use the books to good advantage. It seems best, therefore, to devote this chapter to the discussion of the problem which meets the teacher who must get the money for a school library from local sources.

A teacher or school trustee who would secure a good school library must first know what benefits will be secured by a library, and must have the enthusiasm and persistence, as well as the knowledge, to make other people understand these benefits.

A well-selected small library for children may do much more good in proportion to its cost than any of the large popular libraries. The best books for children, read and re-read, are of much more worth to the child than a careless reading of the best, the second-rate, and many indifferent books. The boy or girl upon the farm who has read, many times over, in the school and at home, *Seven Little Sisters*, *Black Beauty*,

Robinson Crusoe, *The Man Without a Country*, *The Great Stone Face*, and a few other children's classics; who knows the best biographies of Washington, Lincoln, and Franklin thru frequent reading, is almost certain to become a habitual reader of good books. The best books for children are of so much more worth than the second-best that a teacher who can get a few of the best books for her children has the greatest encouragement to do so.

Each rural school should have a library of from twenty-five to a hundred volumes, which should include wholesome and interesting books for the pupils of all the grades. A library must usually grow by small annual or occasional accretions. It is important to secure the best books in the first purchase, so that the good results of their use may be quickly apparent. The child must get the reading habit before he gets the study habit, and if the teacher must choose for the first purchase between a few entertaining and inspiring stories, like *Black Beauty*, and a few books of information, like the children's cyclopædias, she should choose the former. When the children and parents have fairly grasped the idea that books are a means of pleasure, and inspire to better living, the library will grow. The wholesome books that are read for pleasure will procure the means to buy the books of information.

The teacher who would secure a school library should, therefore, know and love the children's classics. If she does not know them, she must learn of them thru other teachers, librarians, county superintendents, state departments of education, or educational journals. When she has read the best of the books, she will find herself eager to have others enjoy them. Enthusiasm for books is the foundation of success. Enthusiasm begets enthusiasm. "I have heard that this is a good book" goes unheeded, when "this is a delightful book," given convincingly, inspires the pupil to get and read.

When the teacher knows and loves the best books, she should find means to get one or more of them, and use them to show pupils and parents that good books give pleasure, inspiration to better living, and broaden the school work. Thru doing this she would find the means to get more books.

In this, as in all other lines of work, she must learn to do by doing. The ability to lead comes only to those who try to lead. Her first efforts to convince people of the necessity of a school library may not be successful, but if she loves books and perseveres, she will convince others.

Sometimes the first money for a school library comes from the pupils. A few years ago a determined teacher in a poor neighborhood induced each pupil to give her one or two eggs each week. On the Saturdays she carried these a few miles to a country store, and with the money obtained from their sale bought a few books. Sometimes teachers and pupils have raised money by entertainments and subscriptions after concluding

an agreement with the school board that the board would give as much as the school would raise.

When the earnest teacher has secured a few good books, she can get others, if she will use the first wisely. A few books should be called the "school library." When not in use, they should be kept in a box or case, with a simple system of records. The pupils should be taught to keep the volumes clean and neat, and to have reasonable pride in their library and the neatness of their books. At every opportunity pupils and parents should be shown by object-lessons the power of the books to entertain, inspire, and instruct. If the teacher knows the books as she should, opportunities will be abundant, and the books will often become the subjects of the daily talks at the homes as well as at the school.

In expending the money for the school library, take pains to get its full value. Do not buy of agents or unintelligent book-dealers. Buy durable editions. There are fifty or more editions of *Robinson Crusoe*, but only two or three that are suited to your purse and your needs. Take the advice of intelligent teachers and librarians, not only in selecting the books, but, in the case of the older books, in choosing the editions. You will be safe in choosing from the lists recommended in this handbook.

You should only rarely pay the list price for a book. Discounts vary according to the amount of your purchase and the kind of books bought. The publications of schoolbook publishing houses are generally subject to smaller discounts than those of houses which publish miscellaneous books. Here, as elsewhere, get information from those who have had more experience. Untrained readers, and many others, like small books. To the child who has read little it seems a great task to attempt to read a large book. The great majority of teachers buy too few small and simple books for their school libraries.

SUGGESTIONS

The following suggestions by Miss Gertrude E. Woodard, of Ypsilanti, Mich., are so practical and well-considered that they will be found very helpful:

If you have not money enough to buy books, make your own. Encourage pupils to bring newspaper clippings on interesting subjects. You will soon have enough to make half a dozen scrap-books. Sort the clippings into geography, history, literature, biography, and the like. Let the children carefully mount them on uniform-sized pieces of paper; then they may be placed between two pasteboard covers and treated as reference-books. This is good work for the boy who always has his lessons and never has enough to do.

A book which will be interesting to children is one which contains the programs of entertainments and school exercises given during the year. These programs, by the way, need not necessarily be printed. Let the drawing class furnish the design for them. A very pretty book may be made of these designs, and pupils are always interested to know that their productions are valuable enough to be bound.

When the birthday of a great man is celebrated, put his picture up in your schoolroom for several days, until the pupils have become familiar with the face. When not in use, these pictures should be kept in a box secure from dust.

Children should learn to take pride in having a library in the room and in keeping it in the best condition possible. Let some pupil be librarian and keep the books in order for a week at a time.

What has just been said assumes that the schoolroom possesses shelving, in some form or other. But what if it does not? Well, if not, do just as you did when you had no money to buy books. You made them, and you can more easily make the bookshelves. Any boy in your room will get you a box from a grocer. Make the shelves of the cover of the box. Line inside of box and shelves with cambric, if rough. Usually, however, there will be some carpenter near by who will gladly help if you can get him interested. Let pupils help as much as possible, for the chances are that they will want to make similar cases for themselves, and that is to be desired.

When books, thru use or accident, become torn or damaged in any way, remedy the mischief as quickly as possible. Always keep on your desk a little jar of flour paste. It is the only thing to use in mending torn pages, inserting loose leaves, mounting scrap pictures, etc. It is made in ten minutes from the following receipt, and costs practically nothing: Paste: (*a*) one tablespoonful flour in cup; one tablespoonful cold water in cup; (*b*) four tablespoonfuls cold water in pan; one-fourth teaspoonful powdered alum in pan. Mix (*a*) until perfectly smooth. Heat (*b*) to boiling. Pour (*b*) slowly on (*a*), stirring always in the same direction. Pour all back into pan and heat, stirring until thick. It will be of the consistency of jelly.

When pasting clippings lay the article to be pasted face down on a slate and paste from center of paper toward the edges. The slate furnishes a smooth surface and can easily be cleaned.

Card system of keeping memoranda:

> Arbor Day celebrations.
> King, R. M. School interests and duties, pp. 123–46.

Card or paper is cut into pieces three by five inches. Cost of white paper which takes ink, six to ten cents per pound. Put one item on a slip. File slips alphabetically by first word, on top line. Keep standing on edge in a box. Comments can be made on the reverse side of slip. In this way preserve authors, titles, and subjects of books, addresses, and clippings small enough to be mounted on slips.

A pamphlet on Arbor Day by N. H. Eggleston may be obtained without cost from the Department of Agriculture at Washington, D. C. Other pamphlets are issued by the Bureau of Education at Washington. Another class of books which may be obtained free, or for a few cents, is the illustrated guide-books issued by the various railway companies thruout the United States; also the lake and ocean steamship companies. Beautiful books descriptive of Mackinac, the wonders of Yosemite, and the Yellowstone National Park may be had for five and ten cents. They serve as attractive reference-books in geography.

Pictures may be mounted on the felt paper used as carpet lining. It can be obtained at any carpet store and costs two cents a square yard.

If you have no wall space on which to place pictures, clippings, etc., make a folding screen, cover it with cloth of one color, and pin on whatever is to be displayed.

F. A. Hutchins.

VIII. THE PRESENT CONDITION OF SCHOOL LIBRARIES IN RURAL SCHOOLS AND VILLAGES OF LESS THAN 2,500 INHABITANTS

On account of unavoidable delays, the subcommittee which was appointed to investigate the present condition of school and public libraries in farming districts and villages of less than 2,500 inhabitants was unable to begin its work until January, 1899. It was found necessary to complete the work of this subcommittee by May 1. A large proportion of the circulars of inquiry which were sent out in January were answered so late in April that it was impossible to tabulate the results.

The circulars were sent to all the state departments of education, to all state library commissions, to a large number of librarians and leaders in educational work in all parts of the country, and to nearly all normal schools. The presidents of the institutions last named were asked to select from among their teachers and students careful observers who had recently taught in small communities or had recently had unusual opportunities for inspecting school libraries in their states. Replies have been received from nearly all the states and territories. While these show that the pupils in only a very few states have respectable library facilities, and that a great proportion have none, they also show that in every state the leaders understand the necessity of school and public libraries, and are making a determined and hopeful fight for better conditions.

The spirit is well illustrated by the remark of the superintendent of public instruction in a southern state. After filling out the blank and looking it over, he writes : "The showing is bad, but we mean to make a revolution in this matter."

Nearly all the villages in New England and New York have free public libraries, and, altho many of them are poorly managed, the library commissions and library associations in those states are rapidly improving them. In the states mentioned, and in Michigan, Wisconsin, Minnesota, New Jersey, Montana, and California, where the states aid rural-school libraries, nearly every school has a library, and these libraries are growing in size and improving in quality. In a few other northern states quite a proportion of the schools have fair libraries, and, occasionally, there are some notable school libraries.

It may be fairly said that in no state in the union have all, or nearly all, the children in rural communities adequate school- and public-library facilities, and that in fully half of the states pupils do not have free access to suitable collections of books.

The school libraries do not, as a rule, have a suitable proportion of simple books for the smaller children, nor are the books, as a whole, well

selected. The replies seem to indicate that the libraries are generally kept in the schoolhouses, and the books are loaned to the children without unnecessary restrictions. The more careful observers usually report that only a very small proportion of children have access to a good number of children's books at home. Ninety per cent. *of the children who attend school* seem, from the replies, to come from homes where newspapers are taken. In two-thirds of the states comparatively few of the children have the opportunity to read the best of the children's periodicals; the same states report that a large proportion of the families are supplied with them. Only a few rural schools subscribe for them, and very few have a supply of children's classics for supplementary reading. Enough schools, however, report such aids to prove that the belief in their value is growing.

A large proportion of the village schools seem to have collections of books, tho most of them are not well selected for their purpose.

A very small proportion of the public libraries in villages are well conducted, and many of the leading teachers do not seem to know how various are the methods by which a *good* public library may help the public schools. Very few of the librarians have had special training for their work.

The most serious difficulty in receiving school libraries and in getting a good use of the books is found in the fact that most of our teachers did not learn to love books in childhood. F. A. HUTCHINS.

IX. IMPROVING POORLY MANAGED PUBLIC LIBRARIES IN SMALL COMMUNITIES

Many small public libraries which have been long established have little educational value.

Some of these libraries can be used only by members of a small association or upon the payment of a fee. Such libraries should be made free, and, usually, the same methods should be used in securing that result as are necessary in getting a free public library. Suggestions for such work are given in a preceding chapter. It is, of course, important to have the owners of the established library give it to the village, or loan it, upon the agreement of the village to maintain it as a free library.

Often these poor libraries are free to the older people, but the librarian is so unaccommodating, and the books are so uninteresting, that the patronage is very limited.

Frequently the board of directors includes many estimable people who have long held their positions, and who are serenely unconscious of the fact that their library is "behind the times." Like Rob Roy, these benevolent old public functionaries are "ower good for banning and

ower bad for blessing." No one likes to displace them, and yet the library will not do the best work until it is managed by a board of intelligent, enthusiastic people.

Poor libraries almost invariably have poor librarians. Good libraries cannot be maintained with incompetent librarians. They may have books of undoubted value and still be worthless, because the books are not of the kind that interest the people of the community, and do not include the best books for children.

To improve a poor library the people should be made to understand its defects. The teachers and leaders of public opinion should learn the methods in vogue in the best small public libraries, and they should demand better service.

The librarian should know how to lead children from the good books to the best. She should be able to help the teachers and pupils of the schools to find the books and reading material that will aid them in broadening the work of the class-room. She should manage to get all the children of the town to come to the library and to make them feel at home there. She ought to make her library a workshop for the teachers, the professional people, and the village study clubs. She ought to know how to use pictures to attract children.

The library should have the *good* books that are being talked about in the outside world. It should buy a few books frequently, rather than large orders rarely.

If the board cannot employ a librarian who is thoroly competent, the individual members of the board should give their incompetent employé as effective help as possible.

Library boards may say, when confronted with a list of reforms that should be made: "We cannot do these things." They may say: "It is unsafe to allow little children to take books; it is unsafe to allow access to the shelves." A sufficient answer to these assertions is found in the fact that the best small libraries do these things without trouble, to the satisfaction of everybody, and to the good of their communities.

A small public library cannot give the wide opportunities for study that can be found in the great libraries, but it can give much more individual help and much more individual freedom, and the librarian who is to work to train her patrons to use these advantages should give place to a more capable person.

It often happens that libraries are started with ideals that are not attainable. A committee of good men will select books of undoubted merit that do not interest the masses of the people. After a few years of trial these able professional gentlemen, who know little of children's books, will make a further effort to get public patronage and will buy full sets of E. P. Roe, Amanda Douglas, Castlemon, Alger, Ellis, Optic, "the Elsie books," and similar stuff.

The reading of a single volume, or even of two or three such volumes, is not seriously harmful, but a boy or girl who reads "sets" of such books as the "Castlemon books" or the "Elsie books" loses relish for the best children's books, and often acquires a morbid passion for reading that injures their work in school and at home.

It may be necessary, sometimes, to have a somewhat sensational story to draw the habitual "dime-novel" reader from the street, but at a time when we have admirable and entertaining books for children in abundance it is almost criminal to give them such unwholesome trash as some public libraries offer.

Librarians, like teachers, need professional training, and all who are interested in the improvement of our educational system should learn of the many opportunities now offered to librarians for professional improvement; for, after all, the best means of improving your library is to put it in charge of a trained librarian, or to help your librarian to secure professional instruction. If you cannot do this at first, get a good librarian to visit your library, talk to your teachers and your women's clubs, and suggest practicable improvements. Your state should have an effective library commission, with ample resources, to aid you in your efforts. Other states have them, if your state has not. Why should your state lag in securing so important and effective an educational agency? The personal aid which the officers of such a commission can give you is the most effective help in establishing and improving *free public libraries.* F. A. HUTCHINS.

X. BY-LAWS SUGGESTED FOR A BOARD OF LIBRARY TRUSTEES

BY W. R. EASTMAN, ALBANY, N. Y.

[Written for this report at the request of F. A. Hutchins]

1. *Officers.* — The officers shall be a president, secretary, and treasurer, who shall be elected annually by the board from their own number.

The secretary shall record all the official actions of the board, and have custody of all its official books, records, and documents, except those in current use by another officer.

The treasurer shall receive all funds belonging to the library, and keep the same in a eparate account till paid out on written order of the finance committee. He shall keep an accurate account of every receipt and expenditure, with date, purpose, and amount, and report the same at the annual meeting and whenever required by the finance committee.

2. *Meetings.* — The regular meetings of the board shall be on the (first Monday) of each month at P. M. at the library.

The annual meeting shall be on the (first Monday) of (month) in each year. Special meetings shall be called by the president, or by request of any two trustees, for the transaction only of business stated in the call.

3. *Committees.* — The board shall choose at the annual meeting three standing committees, on (*a*) finance, (*b*) books, (*c*) administration, each consisting of one, two, or three members, to serve for one year and till successors are elected. They shall act under the direction of the board, and shall report to it from time to time.

The finance committee shall have charge of all library finances, and audit all bills and the accounts of the treasurer and the librarian.

The book committee shall control and supervise the selection, buying, exchange, and binding of books and periodicals, and the sale and exchange of duplicates or rejected books. It shall examine the library from time to time, and report at the annual meeting.

The administrative committee shall have charge of the operations of the library and reading-room, the furnishing and care of the building and rooms, the arrangement, printing, and disposal of catalogs, and of all matters relating to stamps, plates, labels, and printed forms in use.

4. *Librarian.* — The librarian shall have charge of the library and reading-room, and be responsible for the care and safety of the books and other library property; classify and arrange all books and publications, and keep the same cataloged according to such plans as may be approved by the board; exercise control over all other employés of the board, and promptly report any delinquencies to the administrative committee; keep exact and detailed accounts of all money received from fines and other sources, report the same monthly at the regular meeting of the board, and pay all money to the treasurer at least monthly; report monthly the number of books added to or lost from the library, and submit an annual report at the annual meeting, and discharge such other duties as may be prescribed by the board; but in performance of his duties no debt or liability of any kind shall be incurred by him without express authority from the board.

RULES FOR BORROWERS IN A SMALL LIBRARY

[From the Wisconsin Library Commission Handbook]

Rules should be as simple as possible, and not designed to restrict liberty, but to prevent encroachment and secure the greatest good to all.

RULES

Borrowers. — Adults are entitled to draw books by filling out an application blank. Children must obtain the signature of parents or other responsible guarantor.

Borrower's card. — If a borrower's card is lost, a new one will be given after seven days' notice, or upon payment of five cents.

Number of volumes. — (1) Two books not fiction, or (2) one work of fiction and one not fiction, may be drawn at a time. Two volumes of the same work are considered as one book.

Time kept. — A book may be kept two weeks, except recent fiction marked "Seven Day Book."

Renewal. — All books, other than "Seven Day Books," may be renewed for fourteen days.

Over-due books. — A fine of one cent a day will be imposed for books kept over time.

Hours. — The library shall be open every weekday, holidays excepted, from ——— to ———

XI. HINTS FOR CATALOGING SMALL LIBRARIES

BY W. R. EASTMAN, ALBANY, N. Y.

[Written for this report at the request of F. A. Hutchins]

1. *Accession.* — All books of a library should be recorded in an accession book. Provide a blank book with numbered lines continuing across two pages. Rule columns for date, number, author, title, source (i. e., name of dealer from whom bought or name of giver), and cost of each book, and another column for remarks. The books should be entered as soon as received and in any order, and the accession number written in a certain place in each book, for the purpose of reference.

2. *Arrangement.* — All books should be arranged by groups or classes of literature more or less numerous, according to number of volumes in each. In a very small library all history might be in one class. In a large library history or travel would be divided by countries. Science might be in one group or in several groups, to divide the number of books conveniently.

Books of reference, philosophy, religion, sociology, science, fine arts, language, literature, travel, biography, history, fiction, and juvenile books may be considered distinct classes. More complete classification is desirable, and may be secured by the use of either the decimal or expansive system.

When the revision by classes is satisfactory, arrange the books in each class in alphabetic order of authors' names, but books of individual biography should be in the order of the names of persons whose lives are written. This arrangement allows the placing of new books in their true order at any subsequent time.

When two or more books are by one author, arrange them under his name in alphabetic order of titles, unless the books have volume numbers, when the arrangement may follow that order.

3. *Marks.*—To preserve this arrangement every book should have two or three marks plainly and neatly written on a label on the back of the book.

The first mark is to indicate the class or subject group to which the book belongs, and may be either a number or a capital letter or letters, according to the system preferred. In many libraries, where the largest class is fiction, the absence of any mark in the place where the class mark is usually put is a sufficient indication of a book of fiction.

The second mark is the initial of the author's surname, and when several authors in the group have the same initial, they should be arranged in alphabetic order, and all after the first be distinguished by the addition of a number; i. e., if five authors have the initial B., the marks would be "B," "B 1," "B 2," "B 3," "B 4." This is called an "author number." A more exact number for the author's name may be found by Cutter's revised alphabetic order tables.

A third mark must be added when one author has several books in one class. The first letter of the first word of the title, not an article, may be added in the form of a small, or "lower-case," letter to the author number. E. g., if S 4 be the author number for Walter Scott, S 4k will be the book number for Scott's *Kenilworth*. When there are several titles beginning with the same letter, two or more small letters should be used to keep the alphabetic order.

4. *Call number.*—A combination of the class number, author number, and title mark, when needed, is the "call number" of the book, and must be plainly marked on the inside cover and on a label on the back of each book. It should be used in charging the book and avoid much unnecessary writing. A book plate for the inside cover of each book is desirable.

5. *Shelf arrangement.*—Books should be placed on the shelves in the exact order of the call numbers, with spaces between the subject groups.

6. *Lending.*—A book should not be lent till accessioned, assigned to its place, and plainly marked with its accession and call numbers.

7. *Catalog.*—A catalog of all the bound books should be provided. This may be either an author index or a subject list following the order of the books on the shelves, or both. It may be on cards, if preferred.

A card catalog has many advantages. Cards for new books may be added at any time in their proper places. By writing two or more cards for each book, the same book may appear both in its subject order and under the name of its author, and also, if desired, under its title. Cards may be kept in a box, tray, or cabinet drawer.

8. *Bookshelves.*—A bookshelf for ordinary books in a popular library should not be more than three feet long and eight inches wide, and the bookcase should have ten inches' upright space between shelves. Special shelves should be provided for larger books. For this reason movable shelves are recommended.

Ten books on an average can be placed on one foot of shelving. To provide for frequent additions it is well to leave vacant space on every shelf, and to leave the top and bottom shelves empty. It is a safe rule to provide shelving for double the number of

books to be placed on them at the beginning. Allowance must also be made for width of uprights supporting shelves. If cases are eight shelves high, and all the above allowances are made, twenty-six feet of wall shelving will be needed for 1,000 books. A floor case with two faces, thirteen feet long, will also provide amply for 1,000 books.

XII. AIDS AND GUIDES IN LIBRARY WORK

[The following lists were revised from the lists in the Handbook of the Wisconsin Free Library Commission by the City Library, Springfield, Mass., at the request of F. A. Hutchins.]

I. BOOKS ON LIBRARY WORK IN GENERAL

Hints to Small Libraries, by M. W. Plummer. New York: Denslove & Comba, 1898. $0.50.

Gives brief directions for beginning and running a library, and preparing books for the shelves.

Library Primer, by J. C. Dana. Chicago: Library Bureau, 1899.

A handbook giving briefly the most necessary details of library science and methods, with directions for starting a library.

Public Libraries in America, by W. I. Fletcher. Roberts Bros., 1894. $1.

A brief history of the public library and laws relating thereto, with some details of library management and work.

Statistics of Libraries and Library Legislation in the United States. From Report of the Commissioner of Education for 1895–96. Washington: United States Bureau of Education, 1897. Free.

Papers Prepared for the American Library Association in 1893, edited by Melvil Dewey. Washington.

A collection of the papers written for the meeting of the American Library Association at the Columbian Exposition; published in pamphlet form by the United States Bureau of Education. Free.

II. BOOKS ON CLASSIFICATION AND CATALOGING

Decimal Classification and Relative Index, by M. Dewey. 5th edition. Boston and Chicago: Library Bureau. $5.

Abridged Decimal Classification and Relative Index, by M. Dewey. Library Bureau. $0.50.

Made to meet the needs of small and slowly increasing libraries.

Expansive Classification, by C. A. Cutter. Parts I–VI now published (work unfinished). Write for particulars to C. A. Cutter, Forbes Library, Northampton, Mass.

Rules for a Dictionary Catalog, by C. A. Cutter. 3d edition, 1891. Washington: United States Bureau of Education.

Library School Rules for Author and Classed Catalogs, edited by M. Dewey. Library Bureau. $1.

Includes accession and shelf-list rules.

American Library Association List of Subject Headings for Use in Dictionary Catalogs. Library Bureau. $2.

Cutter's Decimal Author Table. Library Bureau. $1.25.

A scheme for giving to each work its own exclusive book number, so that the books stand on the shelves alphabeted by authors under each subject.

III. AIDS IN SELECTING BOOKS

Catalog of the American Library Association Library, 1893. Washington: Bureau of Education. Free.

Catalog of 5,000 volumes shown at the Columbian Exposition. Gives authors, titles, publishers, and prices. Shows how books should be cataloged and classified. Includes a model dictionary catalog.

List of Books for Township Libraries; with supplementary list for graded and high-school libraries. Address State Superintendent, Madison, Wis. Free.

Suggestive List of Popular Books for a Small Library. Madison, Wis.: Wisconsin Free Library Commission, 1898. 2d edition. Free.

List of Books for Girls and Women and their Clubs, edited by A. H. Leypoldt and George Iles. Library Bureau, 1895. Paper, $0.50; cloth, $1.

Invaluable to every librarian or member of a book committee of a public library.

Class List of a Library Recommended for Schools. Albany, N. Y.: University of New York, 1896. 2d edition, revised. $0.05.

Reading for the Young, and Supplement. A classified and annotated catalog by J. F. Sargent, combined with supplement by Mary E. and Abby L. Sargent. Library Bureau. Cloth, $1.50.

Annotated Bibliography in Fine Art. Painting, sculpture, architecture, arts of decoration and illustration by Russell Sturgis, and music by H. E. Krehbel. Edited by George Iles. Library Bureau. Paper, $0.50; cloth, $1.

Publishers' Weekly, the American book-trade journal. New York: 59 Duane street. $3 per year.

Publishers' Trade List Annual, the latest catalog of American book publishers. New York: *Publishers' Weekly* office, 59 Duane street.

Complete Descriptive and Price List of the Public-School Library of Minnesota; a classified list of books selected and recommended by the Public Library Commission of Minnesota. St. Paul, Minn., 1896. Free.

A full list of books, by school grades, as well as classified.

References for Third-Grade Teachers, compiled by May H. Prentice, Cleveland (O.) Public Library, 1898.

A useful book, not only for teachers, but for the librarian.

"Librarian's Help Series." Lists of books, with brief annotations; prepared by the library department of the Baker & Taylor Co., New York. Free.

No. 1. *American History.*

No. 2. *Spain, Cuba, Naval History and Science.*

No. 3. *Literature and Education.* Books of 1897 and 1898.

Library List of Books for Public and School Libraries. New York: The Baker & Taylor Co.

Selected List of Books for School Libraries. Chicago: A. C. McClurg & Co., 1898.

Catalog of a Model Library—500 Volumes. New York: Chas. Scribner's Sons. Free.

New List of Books for School Libraries. New York: Chas. Scribner's Sons Free.

All of these are briefly annotated and classified lists by leading publishers.

Best Fifty Books of 1898, Suitable for a Village Library. Compiled yearly by the Public Library Division of the University of the State of New York from notes by librarians.

One Hundred Books of 1898. Bowdoin College Library Bibliographical Contributions. Compiled by Professor G. E. Little, Brunswick, Me.

A list carefully selected from the *Annual American Catalogue* and annotated with references to reviews in periodicals, favorable and unfavorable.

Monthly Cumulative Book Index. Minneapolis, Minn.: Morris & Wilson. Monthly. $3 per year.

Write to leading publishers for catalogs, which will be sent free.

IV. LITERARY JOURNALS

Book Buyer. New York: Scribner's. Monthly. $1.50 per year.

Book News. Philadelphia: John Wanamaker. Monthly. $0.50 per year.

Critic. New York: 27–29 West Twenty-third street. Monthly. $2 per year.

Dial. Chicago: 24 Adams street. Semi-monthly. $2 per year.

Nation. New York: Box 794. Weekly. $3 per year.

Literary World. Boston: 1 Somerset street. Fortnightly. $2 per year,

Bookman. New York: Dodd, Mead & Co. Monthly. $2 per year.

New York Times Saturday Review of Books and Art. New York: The *Times* office. Weekly. $1 per year.

V. LIBRARY PERIODICALS

Library Journal. Official organ of the American Library Association. New York: 59 Duane street. Monthly. $5 per year; single number, $0.50.

Public Libraries. Edited by M. E. Ahern. Chicago: Library Bureau, 217 Madison street. Monthly. $1 per year; single number, $0.20.

XIII. THE LIBRARIAN'S SPIRIT AND METHODS IN WORKING WITH THE SCHOOLS

INTRODUCTORY NOTE

In recent years a good many elaborate investigations have been made, by teachers, psychologists, and others, of the reading of children; what books and papers they read; what kind they most enjoy; what books furnish them with good ideals; what ones seem most to influence their lives.

The replies to these questions have led to little in the way of definite conclusions. Few people can so frame a set of inquiries as to make the answers to them of value, even if those answers are clear and honest. Few teachers — and most of the inquiries have been made by teachers — can put a set of questions to their pupils in such a way as to get from them straightforward, unprejudiced replies.

Furthermore, the atmosphere of school, the wishes of principal and teachers, as expressed, for example, in courses of study and in books for reading placed in the pupils' hands, or within their reach, all tend to influence the children in making their replies much more than one would at first suppose. If, for example, a large number of answers received from a number of different towns in any given state show that *Black Beauty* has been much read and greatly enjoyed by children in Grades 4 to 7, one may at first conclude that *Black Beauty* is a book which appeals to the youthful mind thru its own unaided attractiveness; and that, if it stood on the shelves of an open library with many other good books for children, it would be one of the first books to be selected and read by a very large majority of those who used that library. Further consideration, however, probably calls attention to the fact that *Black Beauty* has, for certain definite reasons, been introduced into the schools of that state and vigorously pressed upon the attention of the children by school

boards, superintendents, principals, and teachers, and that the children have by no means chosen it spontaneously. And so a careful examination of the influences surrounding the young people who have made answer to these many inquiries into children's reading shows that in every case little reliance can be placed on most of the conclusions drawn from them. As in other departments of child study, we have here as yet done little but illuminate our ignorance. This is helpful, of course; very helpful, indeed, if we recognize the light we get for what it is, and do not take it for something else.

From these inquiries into children's reading, however, and from kindred investigations made by those interested in child study in general, in experimental psychology, and the like, we seem to be able to draw a few very general conclusions, such as these:

That the time when the habit of reading is most likely to be formed is in the years from eleven to sixteen. That in the years from six to sixteen, and especially during the first part of the period, the influence of the teacher in determining the choice of books read may be very great. The teacher of average ability, it would seem, can, if she will, guide the choice and interest of most of her pupils.

From these facts, and from the like, generally admitted, fact that this period from six to sixteen is one in which tastes and habits in general are most easily and most commonly formed, and the general trend of life most seriously affected, we can conclude, further, that books can have, and do have, a greater influence for good or ill on the lives of most people, by affecting them when they are young, than we had supposed; and this influence, thru the teacher's guidance, can be made to work for good even more strongly than we have dared to hope.

This conclusion, vague and general as it seems at first to be, is of the greatest moment to the librarian. She commonly has on her shelves hundreds and thousands of volumes — rather hastily selected, not carefully examined — which she is handing out almost at random on every day to scores of young people who have little power of selection and will take — one must fear — the book that is full of the evil communications which corrupt good manners, as eagerly as the one which is wholesome in all its influences. She is busy. She has little time to put the right book into the right hands. She likes her library to be popular. She, perhaps, is impressed more by the quantity of books read than by their quality. If she is wise, she sees that for the educational work her library is trying to do, especially with young people, she needs the help of those who can give care and thought to the individual. She sees that the free public library should hasten, after equipping itself with the best obtainable material for children's reading, to interest parents and teachers in that material and persuade them to assist in guiding the reading of the children who borrow books. This means, in the present state of society, when

parents take a very moderate degree of interest in the books their children read, that, as far as its work with young people is concerned, the public library must, if it would do good and not harm with its books, rely, to a very great extent, on the assistance of the schools.

The library can, no doubt, be of great help to the teachers; and much space in other parts of this report is taken up with suggestions to teachers of how they can get much of value out of the public library. But our report will fail in one of its most important missions, if it does not bring home to many librarians, very strongly, the fact that, as far as its work with young people is concerned, it can do little without the sympathetic co-operation of teachers.

How, then, shall the librarian conduct herself, and how shall she manage her library in order to get from the teachers of her community the maximum of sympathetic co-operation, and be of the greatest possible assistance in the education of the young? These questions I have tried to answer, not fully, but in a suggestive way, by giving a brief statement of the equipment the librarian of an ideal library must have for this work and of the things that an ideal library may do in its co-operation with the schools.

THE LIBRARIAN AND HER EQUIPMENT

In establishing helpful relations between libraries and schools in any given community the things that are most necessary on the librarian's part are sympathy with the end in view and a broad appreciation of the particular situation. This sympathy and appreciation will lead to good work, whatever the conditions. The special knowledge and skill needed can be acquired in the doing.

Another very important qualification of the librarian, and perhaps the most rare, is a wide and sympathetic knowledge of books of all kinds, especially books for young people. This wide knowledge of books is not the product of a night, or of a week, or of a month, or even of a year of toil and study. It is a knowledge which is in large part not knowledge, but native talent; and the knowledge which goes with this native talent is acquired only by reading scores and hundreds of books with care and with interest.

The librarian, then, is and has been an enthusiastic reader. During the early years of her life, and especially from ten to fourteen, she familiarized herself, not as a duty, but as a pleasure, with the best of children's books; with the children's books we call classics. We call them such, not because they are necessarily the very best books that can be written or have been written for children, but because they contain expressions, characters, incidents, that are constantly reappearing in literature, and are interwoven with the life of the race. They are the books that have become a part of the birth-right of every American child. They are

alluded to and they are listed in large part in Mr. McMurry's section of this report. The librarian who did not know and enjoy these when young is poorly furnished for work with children.

The librarian understands library management. If she has had no technical training in a library school, or has not had experience in a well-managed library, she gets some of the books and periodicals mentioned elsewhere in this report, and reads and studies the subject and learns by doing.

She realizes that books are tools, are not sacred things, and find their best end in being worn out by reasonable service.

She is fond of children, is patient with them, and understands them. Experience in teaching for a few years would be of the greatest assistance to librarians who are trying to work with schools.

There are now in print — and a number of them are noted elsewhere in this report — many lists of books for children and teachers, several of them well annotated. Copies of these lists our librarian has at hand and is ready to lend, and makes use of them constantly in adding to her collection.

In the last twenty years a great many articles on the reading of children, literature for the young, and kindred subjects, have appeared in leading periodicals of this country, and a number of books, some of which are mentioned elsewhere in this report, have appeared on the same subject. These books, or as many of them as possible, the librarian studies herself and places with the teachers' books in the teachers' corner.

As the librarian's field of work widens, she discovers, first of all, if she is honest with herself, her own limitations in respect to the wide and intimate book-knowledge, already mentioned, and then she discovers it also in her associates, the teachers. It is inevitable, in view of the character of the preparatory training the average teacher gets, that in wide knowledge and keen appreciation of literature, and especially of literature for children, she should often be lacking. We have decided that books proper for children to read are excellent things, and should be easily accessible to them. We have asked for them, and authors and publishers have supplied them. We attempt now to do with them the things we see should be done, if we are to get out of them that which we wish to get, and we discover that those to whom we must appeal to make proper use of them are themselves very lacking in knowledge of them. We are improving in this respect, but little has yet been done toward making the average teacher thoroly conversant with children's books, with making her such a reader of books as she must be before she can do with children the things we wish to have done. But the fact of the presence of the books themselves in libraries and schools, and the daily use of them, and the general realization of the possibilities in them, will bring about in a few years a vastly better equipment in this direction, in the teaching force as well as in the library force, than we have as yet had.

The librarian realizes that, after all, a collection of books, however good, however well-housed, however attractively arranged, is of little value, has little vital force, and does not count for much in the community, unless there is added to it the right kind of a librarian. A good librarian is more than half of a good library. Realizing this fact, she tries to live up to her opportunity.

While she feels that the most efficient allies in her work are the teachers, and while she feels that unaided by them she can do little for the vast majority of her young students and readers, still she does not at all relax her own vigilance. She keeps a watchful eye on as many of the children as possible; she lends only what she thinks to be the best of books; she is unceasing in her efforts to learn which are the best; she notes the character of the readers who ask for what she fears are books of doubtful value; she checks the story mania, where she can; she looks for opportunities to turn attention from better books to the best books; she does not think any habit is good so it be a reading habit; she keeps it in mind that books are for pleasure—but for the pleasure of a lifetime, and not of the day only; are for profit—but not profit in money only; are for knowledge—perhaps not for knowledge she can ever care for, yet good and useful still; are for wisdom—but possibly not for wisdom as she sees it. She is always mindful that she is a public servant, not a ruler; that she is a counselor, not a faultless guide; that she is a student of books with the children as fellow-students, not a teacher who has already learned all that books can teach.

THE LIBRARIAN AND THE TEACHERS

The librarian has no special card for teachers, for she finds that by adopting a modern charging system she does not need to make distinctions between her borrowers. She can lend to any person six or sixty books as easily as one, and a special card makes a distinction which by those other than teachers may be thought invidious.

She has a teachers' corner in the library, and keeps there, with special books for teachers, copies of the best and latest pedagogical books and journals, and lends them.

She prints occasionally, and distributes thru the schools, brief statements in the form of circulars of what the library does with children, what it would like to do, how it helps teachers, and how it would like to help teachers.

She prints also from time to time brief selected lists of books, magazine articles, poems, speeches, etc., on special topics, like geography, American history, flowers, birds, Longfellow, Lincoln, Arbor Day. If possible, she prints these lists all in the same form on sheets of the same size, so that the teacher preserving them may keep and handle them with ease. These are posted on the bulletin board and freely distributed.

She forms a reading committee of teachers to help in selecting from the new, and old, publications the best books for young people, and in deciding what books it is best to supply in large quantities and to urge the children to read.

She takes note of teachers' institutes and the topics up for discussion in them, and she keeps watch of educational journals to see what problems are being discussed, and makes up lists and buys books accordingly.

She does what she can to induce teachers to add library departments to their county, district, or state associations, or at least to give up a portion of the time at the meetings of such associations to the consideration of problems which touch her work.

She endeavors to have teachers, principals, and superintendents on the committees of her library, especially on those having to do with its general economy, arrangement, and selection of books. She makes the fact felt that her institution is part of the educational system of the community, is not something separate from the schools, but a part of them.

She visits the superintendent of schools, and the principals and teachers. She does not make of her work the opportunity to impress them with the fact that she has a "mission," and that she proposes to elevate the community by her books; and she does not insist that teachers generally are dull, if they do not at once make use of her library; but she tactfully makes it plain that her library is there to be used.

She meets with the teachers whenever occasion offers, and is ready to talk with them about matters in her field at all times.

She visits schoolrooms, where she can do it without seeming to intrude, and makes herself familiar with the teacher's work, its opportunities, its needs, and its limitations. She gets the courses of study used in school. She learns what books are already in the schoolrooms; what ones are used as supplementary reading; what, and how many, have been bought in sets; and in every way makes herself thoroly familiar with the present resources of teachers and children in the way of books.

She always works in sympathy with, and with the full knowledge of, the superintendent, and in accordance with his suggestions and wishes.

She ventures, if teachers do not borrow voluntarily, to suggest to them that they can take books to their schoolrooms and see if they can make use of them there. This is not an easy thing to do, for unless the teacher is in sympathy with this work, to put books in her hands may be to waste good material. For the teacher who is beginning to use books in her daily work the simpler they are the better. Picture- and story-books, such as she can lend to restless pupils, either for use in the schoolroom or to take home, are the best.

She looks up such a subject as geography, and by examination of the text-books used, and by talks with teachers, discovers what she can do to

assist in making the subject more interesting. She finds, perhaps, that pupils call at the library for certain specific books, or for books on some special topic which the library lacks, and she equips the library well for such a call next time. She encourages teachers to borrow from the library for a few weeks, or a term, books on the topics in geography, or history, or science, which may be uppermost for the time.

She asks teachers and principals to give her in advance names of topics and subjects of study on which the children may ask for books later. She announces on her bulletin board that books on such and such a topic will be found in such a place, or are such and such books.

If one or two teachers begin to take an interest in the library and borrow books from it for schoolroom use, and their experiments are successful, the librarian lets this fact be widely known.

She does not forget that the teacher's occupation is very wearing; that the best teachers are often the busiest; and that it is the best teachers whom she most wishes to interest. The teacher must keep her children to the course of study as it is laid out; and no matter how flexible that course may be, still it is true that to do the things that must be done each day takes nearly every moment of her time. Opportunity to do the work with children suggested in this report is not easy to find. The wise librarian is not discouraged, therefore, even tho most of the teachers she attempts to interest are slow to take up with her suggestions.

As soon as the time is ripe and her supply of books permits, she lends them to interested teachers, in groups of ten to fifty, to put into their rooms as schoolroom libraries. The school authorities may, of course, supply these schoolroom libraries themselves. It is perhaps better, however, that they be supplied by the library. In the library will usually be found the best collection of books to draw from, and the most skill in their handling. The schoolroom library is to be used just as are the books the teacher may have of her own or may have secured from the library for her desk. She uses them either for reference work, or lends them to pupils to take home. If she does the latter, then the schoolroom library is in effect a branch library; and the schoolroom library, under the supervision of the teacher, is the ideal branch library for lending books to young people. The teacher with forty pupils and fifty books, the latter changed from month to month as she may choose, and as the wishes of her pupils may indicate, can with little difficulty put the right book into the right hands time and again, when the librarian, with the best intentions in the world, finds it impossible to do more than supply each child's request, without regard to the fitness of that request.

The librarian hears it said not infrequently, by librarians, that teachers ask more and are more exacting in their requests generally than any other class of library patrons; but she says that it seems proper that this should be so. She is glad that they make use of her library. She is glad

that they make complaints, and is not disturbed by them. She discovers that their demands are generally not so much in the spirit of fault-finding as in the desire to get out of the library all that can possibly be got. And she encourages, rather than discourages, the asking spirit in all the teachers with whom she comes in contact.

THE LIBRARY BUILDING, OR ROOM, AND THE CHILDREN'S DEPARTMENT

The building for an ideal library, or the room in which it is placed, is simple in the extreme. The best arrangement for a small library is one large, well-lighted room without partitions. The cases are low, and are set sufficiently far apart to allow several people to pass between them at once without crowding. The tables and chairs are near the books. If a corner for work is needed, it is separated from the rest of the room, not by a partition, but by a light rail. The desk is near the entrance, and the visitor having passed this desk is literally "in" the library and among its books.

A corner in the library is given up to children. The children's books are here arranged in classes, just as are other books in the library, and with the same marks. Stories and books on other subjects are not ordinarily shelved together in one series, tho for some special purposes or occasions they may be so arranged.

The cases for children's books are low, not over five feet high, and lower still would be better, and the books are not put lower than two feet from the floor. This gives two or three rows of books one above the other, at the utmost, and prevents crowding among those who are looking them over. The lower the cases are, the easier it is to keep watch of the unruly and noisy. Furthermore, if the cases are low, the tops of them serve excellently for globes and vases, and any articles of interest one may wish to put there.

There is a globe in the children's corner, and a place to hang up a large wall-map, which is changed from time to time.

On the walls are pictures attractive to young people, preferably in colors. These pictures are such as one would wish to have in the schoolroom. They are large and broad in treatment.

A bulletin board in or near the children's corner has on it lists of entertaining books — general lists, lists on special topics; pictures, sometimes of a general nature, sometimes having to do with one subject; a set of pictures of animals, or birds, or great buildings, or eminent men. The same bulletin board holds, in large type, an occasional sentence or verse of poetry, such as experience shows children are attracted by and are fond of learning.

THE LIBRARIAN AND THE CHILDREN, AND THE CHILDREN'S DEPARTMENT

The librarian makes the process of getting a borrower's card at her library very simple for the young people. She, perhaps, thinks it wise to

insist that the card be signed by a parent, not so much to protect the library as to engage the interest of the parents in what the young people read. She does not feel, however, that this is essential. She surrounds the process of the signing of the name, the giving of the card, and the presentation of a slip containing library rules and information, with sufficient dignity to make it seem of importance to the children.

She keeps her library immaculately neat and clean, and trains the children to help her in this work, establishing a library league for this purpose, if possible. It takes time and patience to lead children to keep in order the books they themselves use, but it is not impossible and is worth the doing.

She notes that the weak points of American children are not timidity and nervousness. Still, she realizes that many of the children, perhaps those whom it would be best worth her while to assist, are shy about visiting a new place, and are slow to ask questions. She meets such individuals more than half way.

The children's department is made especially strong in entertaining stories, the children's classics already alluded to being first chosen. It is far better to purchase a large number of duplicates of each of fifteen or twenty standard books that children read than it is to scatter the money they would cost over the whole field of children's literature and buy a large amount of inferior stuff.

The librarian has investigated the subject of children's reading for herself, and has come to the conclusion, as have all others who have given the matter serious attention, that in the children's corner in the public library, or in the schoolroom library, or in the library in the school building, or in any collection of books anywhere to which children are to have access, low-grade books, no matter how popular they may have proved themselves to be, are not needed in order to attract children; and that poorly written, unreal, fourth-class, silly stuff is not needed as sweetmeats and temptations to draw children to a collection of good books in an attractive library.

She learns from talks with teachers whom she has interested in the subject that the reading of wholesome children's books does not, save in very unusual cases, distract the minds of the children from their studies. She learns, on the contrary, that the bright children, the well informed children in the schoolroom, are the ones who are most likely to be eager and wide readers at the library.

With the children's books she puts the books suitable for reading aloud to children by parents and teachers. It is difficult to draw the line definitely between these two classes. In selecting the books suitable for young people it should be borne in mind that there is much good literature which children themselves will not read, but like to have read

to them. Some of this literature can very well be put with the books the children like to read themselves.

The reference-books for children in their own department are not many in number and are simple. One or two encyclopædias, an atlas, a dictionary, and a few sets of periodicals, like *Harper's Monthly* with its index, and *St. Nicholas*, serve better than more elaborate books.

The librarian, while supplying a special corner for children and giving them there easy access to the books adapted to their wants, does not forget that an important thing in education is ability to use a large library to advantage. She encourages, so far as the arrangement of her room permits, the use of the main library by young people. She tries so to train them, or help them to train themselves, that they are not lost or dazed in a large collection. She helps the very young people to make use of the laboratory method in the library, as science teachers lead them to use it in physics and chemistry. She finds that children quite quickly catch the spirit of investigation, the spirit of the seeker after truth, and thus become students in the best sense of the word.

To help the children to make use of reference-books she calls attention to such helps as tables of contents, page-headings, indexes, and bibliographies. She gives them an opportunity to consult encyclopædias and dictionaries of varying character. She encourages them to study by topics.

So far we have spoken of books on their artistic, literary, general-culture side; the side which, for the younger children at least, must always remain the most important. But there is another side, distinct still from both the "culture" side and from the scientific side, with which the zealous librarian must acquaint herself, would she do her best work, especially with children who have reached the ages of sixteen to eighteen. This is the purely utility side. There is no calling in life, from brick-laying to architecture, from shoe-making to railroad-building, that does not have the results of latest experience and observation in regard to it set forth in periodicals and books. These periodicals and books are more or less accessible in every public library. The majority of boys, about ninety-five out of one hundred who attend our schools, are on their way to some manual, semi-manual, or clerical calling. They will be able to equip themselves better for their calling, whatever it may be, if they make themselves familiar with its literature. The humblest workman in the humblest occupation can adapt himself better to his work, and will have a better chance of advancing in it, if he reads up to it. This is an aspect of printed things which is rarely touched upon in the schools. The sympathetic librarian, as she sees boys grow to young manhood under her eyes, will watch their tastes and inclinations where she can; will note the occupations they are likely to enter, and direct them to the utility-literature of those occupations.

The librarian makes a collection of pictures, saving therefore old periodicals that are well illustrated, and making requests for old numbers and back volumes that are past other usefulness, to be used for their illustrations. She gets together and mounts on cardboard collections of designs, of pictures illustrating the work of different artists, of pictures to be used in geography and history and science study. These she arranges in groups, hangs on her bulletin board, and lends to teachers one at a time or many at a time.

J. C. DANA.

XIV. WORK IN CERTAIN TYPICAL LIBRARIES

The libraries mentioned in the following notes are not exceptional. They are typical of a large number, in which some of the things mentioned in the foregoing outline have been attempted.

Nearly twenty years ago Mr. Samuel S. Green, librarian of the Free Public Library, Worcester, Mass., delivered an address before the American Social Science Association, on the relations of public libraries and public schools. In this address he outlines or hints at nearly all the things that have been done since 1880, in bringing libraries and schools into closer relations; and during those twenty years Mr. Green has again and again urged upon teachers and fellow-librarians the necessity for active co-operation, would they produce the best results from their efforts. The Worcester library has been the pioneer in the world, in the work this report considers.

The library league was first tried by the Cleveland, O., library, after a suggestion borrowed from Colonel George E. Waring, of the street-cleaning department, New York city. Colonel Waring appealed to the children in certain parts of the city to form leagues and subscribe to an agreement to help to keep the city clean and beautiful. The Cleveland library established a library league. In joining this league the children signed an agreement to try to handle the library books with care and to persuade others to do the same. The experiment was very successful, and led to other things than simple care of books. It has given the library a hold on many thousand children, and has helped to strengthen the library's hands in working with the teachers. No library in the United States has shown a more admirable public spirit than has that of Cleveland, and any librarian who may be contemplating bringing children and teachers into closer relations with her collection of books cannot fail to get inspiration and suggestions from the reading in the Cleveland reports of things that have been done there in recent years.

At the free library of Pratt Institute, Brooklyn, in its new building, special accommodations have been made for children. The attendants in charge of the children's department have studied to equip themselves for the work, and are constantly devising ways of interesting children and leading them to the use of better books. Exhibitions of pictures, of notable men and women, of notable buildings, of special regions, of birds, animals, etc., accompanied by book lists, are attractively put up in the children's room from time to time. In no other library has a more careful study of the problem of the children and their books been made.

The Free Circulating Library of New York city includes now eleven or twelve branches. These branches are in part rather inadequately housed. It is interesting to see how an enthusiastic library spirit has been able to make books and papers attractive, especially to the young in the poorer quarters of the city, even with very insufficient accommodations. Several of the collections of books number only nine or ten thousand volumes;

room for readers may be very limited, and yet access to shelves is permitted, and children are controlled and interested, and are in many cases led into habits of good reading.

In Buffalo, N. Y., there were school libraries in a number of the school buildings of the city. These were about a year ago turned over to the public library. They were found to contain a good deal of useless material. This was set aside, and the old libraries were replaced by collections of books adapted to each school, sent out from the library and changed more or less from time to time, as teachers and principals desired.

The Public Library of Detroit, Mich., has for twelve years been sending school circulating libraries to different school buildings of that city. It now has about ten thousand volumes in these collections. They go to all grades above the fourth, there being a total of some eighty boxes for their transportation. The library in each room is changed once in four months. No one school is likely to get the same books oftener than once in two or three years. The purpose of these schoolroom libraries is to give every child in the public schools some acquaintance with good literature. The books are in charge of the principal of each building, and are given out for home reading under very simple regulations.

In Milwaukee the teachers, under the general supervision of the librarian and his assistants, issue library cards to their pupils. These cards having been issued, the teachers go to the library and, being admitted to the shelves, select enough books for their pupils. To aid the teacher in her selection, lists have been published of books for young people and of books for special purposes. The books the teacher selects are placed in boxes and sent by the library to the teacher or to the school. They are changed after eight weeks. In 1897, 23,000 books were thus issued nearly 90,000 times.

In Utica, N. Y., courses of reading have been published in co-operation with the library. These courses contain two lists, one for the grammar schools, the other for the lower grades. Some of the books in these courses are read by the teachers to the pupils and then discussed in class; others are read in the class; and others read by the pupils out of school. Teachers are asked to see that out-of-school reading has been profitably done. Excessive reading is discouraged.

One of the first school systems in the country to adopt the schoolroom library was that of the North Side, or District No. 17, of Denver, Colo. Small collections of books, about fifty in number, were placed in nearly all of the schoolrooms of the district several years ago, and have been kept up and extended over the whole district since. A brief, account of this system as carried on in North Denver is made a part of this report.

The Free Public Library of Evanston began co-operative work with the schools about three years ago. Its experience shows how much can be done with limited means, a small supply of books, and narrow quarters. Thru several schoolroom libraries it reaches many families who would not otherwise hear of the main library. The assistant librarian in charge of this work visits each school as often as possible, and holds teachers' meetings for the discussion of children's books and plans of future work. The teachers come often to the library and suggest books for purchase. The co-operative spirit extends to superintendents, principals, teachers, and all the library staff. The school libraries contain each 100 books chosen for the six lower grades. Each has a printed, graded list. The collections go from one room to another, remaining three months in each building. The librarian mounts the colored plates from the *Art Amateur* and similar publications, and lends them for art studies or to brighten schoolroom walls; and mounts pictures of birds and animals gathered from all sources for use in nature study, and saves other pictures for historical and geographical work. These pictures cost, when mounted, less than two cents apiece. They are lent separately or in groups. The library has formed a children's library league. The assistant librarian talked with the teachers of each school in regard to it, and circulars were distributed to the children before forming it. The teachers presented the subject to the children, and also looked after the matter

of registration. The children from the graded schools near the library and from the high school visit the library frequently for reference work, and the librarian and her assistant give them training in the use of reference-books. The library prints a set of special holiday bulletins. It reserves books for class and essay work. During the year the library gives exhibitions of such collections as that of birds with nests and eggs; a collection of drawings lent by some artist for the occasion, or of pictures from the library's supply. The library has established a children's corner with open shelves, containing books and numbers of young folk's periodicals, and finds that the young people discover attractive books which they did not know of and could not know of thru the unsuggestive medium of the catalog. J. C. DANA.

XV. SCHOOLROOM LIBRARIES

BY CLARISSA S. NEWCOMB, LIBRARIAN, NORTH SIDE SCHOOLS, DENVER, COLO.

[First published in the *Colorado School Journal*. Added to the report at the request of J. C. Dana.]

To one who knows how to use books a well-selected library is one of the most valuable means of education. The training of children in the choice and use of books is therefore an important subject to all teachers. An early beginning is necessary, or else the great majority—those who leave school before the higher grades are reached—wholly escape this training.

But how shall this training be given? is the question. How shall we bring the child in touch with good books? Our experience in district No. 17, Denver, leads us to believe that each schoolroom should have its library. We have found that a collection of fifty books in a room, chosen with reference to the age and ability of the pupils in that room, is the most satisfactory means of forming a taste for good literature. We have tried other methods — the central library, the library in the principal's office, and the plan of moving books from one room to another. The room library — that is, a certain number of books which are the permanent property of the room — has proved the best, because it acts as a training school for the use of the larger public library. We favor the room library for the purpose of getting the little folks accustomed to the use of the books and for the immediate use of the pupils in the upper grades. The more expensive books which can not be afforded for each room are kept in the principal's office. Thus the pupils are led to the public library, for the use of which these small collections have well trained them. That this room-library plan increases the demand for books from the public library has been demonstrated to us by the greater number of cards now held by the pupils.

Beginning with the second grade, each room in the district has its own collection of books, which remain there from year to year. As the children go from grade to grade, they are each year brought in contact with another set of books new to them. Instead of moving the books, we move the children. Each room has its reference-books and its books for lending. When not in use, these are on a table or on shelves accessible to the children at all times. The pupil thus becomes acquainted with the books and feels a personal pride of ownership, and the close contact of the child with the books teaches him to love and respect them. He becomes interested in reading and familiar with his own small library.

Fewer disappointments occur in the selection of books than where the collection is larger; hence fewer obstacles are presented in the formation of a love for reading. The range of choice is narrowed, and the teacher feels the responsibility of directing the children's reading, for the library is but another tool with which to mold the character of her pupils. All become readers if the teacher is skillful and tactful and enters sufficiently

into child life to appeal to the pupils. Many teachers have found the library an effective means of reaching and interesting dull or indifferent pupils.

The teacher can influence and largely control the children in their choice of reading. A reference to a book little used is enough to commend it to someone in the room, and its reputation is established. Or some pupil may be asked to give an extract from a book he has lately read. That will interest the other children, who will wish to learn more about it. The recitation is made brighter, and that book goes into the homes and keeps the children from the street.

Each book is selected, not alone because of its intrinsic merit, but also because it has proved interesting to several children of like age and grade. No mistakes have been made when we have left the matter to the children. They know what they enjoy. When we find any attractive book, we try it in a room. If it is approved by those relentless little judges, the children, we buy a copy for each room of that grade. In the case of a very popular book we sometimes place two or more copies on the shelves.

We do not attempt to force upon the children books that are highly instructive, or which we think they ought to like. We try to supplant the trashy stuff by providing them with good, yet interesting books. Our aim is to give them a love for good literature; for when they have acquired that, we need have no fear that their education will stop when they leave school.

No child should be expected to read every book in the room library. The reason is obvious; tastes differ among the children, as among adults. Out of the fifty books, representing history, biography, adventure, fairy stories, etc., each child will no doubt find some which he will enjoy. Within the room list we let the child select for himself. Any book which is really enjoyed, which enlarges the range of thought, which makes him happier, is worth the reading, even tho it has no visible purpose as a part of his school education.

DISCUSSION

J. H. VAN SICKLE, vice-president of the Council, explained the work of the committee, calling attention to some of the most valuable features of the reports — particularly to the lists of books for reading; to the practical suggestions relating to the use of the reading record; to the matter of supplementary reading; to the economy of management; and to good literature. Mr. Van Sickle urged the importance of distributing such literature as largely as possible.

L. D. HARVEY commended the value of the report, and especially for its suggestiveness. While no two may agree on these lists in detail, all agree as to their great suggestive value. He also called attention to the importance of becoming familiar with this report and of interesting teachers to do the same. Mr. Harvey contrasted the conditions and opportunity for reading as they existed but few years ago with the richer opportunities afforded by the libraries of today. He emphasized the value of pupils' reports of their reading, and suggested the importance to teachers of tracing out, step by step, the lines by which children have been led to interest in valuable reading. One of the things vital to efficient work is that the teachers know the books which the pupils read. Another excellent suggestion of the report is that the teacher and the pupils be assisted in reading by the use of classifications and indexes, thus aiding them in commanding the resources of the entire library. He also called attention to the value of periodicals, where these are available, for the use of pupils. It is better that they be not bound in yearly volumes. The best method is to divide them by articles and have them bound in paper and indexed like other books. Pupils will use them far more in this form. Careful work must be

done by the teachers, and, if done, the children will be led to read what is best in literature. This work requires as scientific and as skillful direction as anything in the school curriculum. Don't ask the little people to do much writing. Let them talk to you about what they read. Encourage them to give the language of the author, since this will increase their power of expression; it will give them a richer vocabulary, and, if persisted in, will solve the problem of language in the lower grades.

MR. SCHAEFFER followed, referring to the work which Andrew Carnegie has done for the schools of Pennsylvania in increasing its fine libraries. He emphasized the distinction between the literature of information and the literature of power, and stated that it is the literature of power which leads toward higher levels.

GEORGE P. BROWN said that we are still feeling, by a process of trial, how some of these things work out. Children must be allowed to move along their own lines. A teacher in the Mississippi valley had said to him that children are their own best guides in these things. He had been comparing "the living things" of the reading of *Evangeline* in a fourth grade with the lack of inspiration of the same in a high-school grade. We are underestimating the ability of the children to comprehend and to enjoy the things which are of highest value.

MR. GREENWOOD expressed himself as heartily in sympathy with the report. He said that its wide distribution should be secured. He was closely associated with library work in Kansas City, and learned from the librarian, a lady, that the little fellows do not want "baby books." Children very early tire of these, as we have many times learned. We have frequently found that children of the elementary schools have read more advanced books, and later have taken them up for the study of literature in the high school. Children are largely influenced by what their mates tell them of their own reading. Were it in my power, I would have 100,000 copies of this report distributed among the teachers of this country.

J. H. HOOSE said that too much interest in reading for children is detrimental to the intellectual growth of the reader.

MR. GREENWOOD agreed that this is true, especially of superficial reading.

MR. FITZPATRICK asked why it was, then, that such men as Gladstone and other omnivorous readers had not been harmed.

MR. SOLDAN said that these were not of the average mind; and that he was reminded of a discussion in Aristotle's *Ethics* between the "golden mean" of virtue and the "vice" of extremes. About four years ago it seemed advisable to formulate plans for the reading of his pupils. The course adopted in a general way was as follows: The first year, chiefly fables; the second year, the myth, since the Greek myth deals largely with nature; the third year, when geography is of interest, much of exploration and American history; the fourth year, legends and stories from Greek and other classic history; the fifth and sixth years, stories from the history of the world, and the migration of nations; the seventh year, history in extended biography; the eighth year, biographical history of great musicians, statesmen, inventors, etc.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—Wednesday, July 12, 1899

The department was called to order by the vice-president, Miss Florence Lawson, at 2:30 P. M., in Ebell Hall.

After expressions of regret at the absence of the president, Mrs. Kraus-Boelté, Miss Lawson delivered an address of welcome.

The response of the absent president was read by Mrs. A. W. Dresser, of Burlington, N. J., who had crossed the continent to bring Mrs. Kraus-Boelté's message.

On motion of Miss Anna Jenkins, of Los Angeles, the following message was sent to the absent president:

Los Angeles, Cal., July 12, 1899.

Madame Maria Kraus-Boelté,
Hotel San Remo, New York:
Heartfelt regrets for our president's absence, and loving greetings from all.
Kindergarten Department of the National Educational Association.

Dr. Nicholas Murray Butler, of New York city, was introduced, and spoke on "Some Criticisms of the Kindergarten."

Professor Thomas P. Bailey, of the University of California at Berkeley, was the next speaker. His theme was "Character Study in the Kindergarten."

Miss Mary F. Ledyard, of Los Angeles, was introduced. Her subject was "Relation of Imitation to Originality and Consequent Freedom."

Dr. William N. Hailmann, of Dayton, O., who had been greeted with applause when he appeared upon the platform, was invited to address the department.

The Committees on Nominations and Resolutions were announced.

The day was completed by a reception given by the resident kindergartners on the grounds of Mrs. Neal, on South Flower street.

SECOND SESSION.—Thursday, July 13

The Thursday afternoon session was opened by the singing of a lullaby and "Genevieve" by Miss Goodall, after which Dr. C. C. Van Liew, of Los Angeles, was introduced. His topic was "Mental and Moral Development of the Kindergarten Child."

Miss Miller spoke briefly of the kindergartens of Chicago, after which Miss Anna Stovall, of San Francisco, spoke on "Music in the Kindergarten;" Professor E. E. Brown, of Berkeley, Cal., on "Naughty Children;" and Superintendent Frederic L. Burk, of Santa Barbara, Cal., on "The Kindergarten Child Physically."

The report of the nominating committee — Miss Mary Miller, of Chicago; Miss Mary Murray, of Springfield, Mass., and Mrs. L. A. Truesdell, of Milwaukee — was read and adopted as follows:

For *President*— Madame Maria Kraus-Boelté, New York, N. Y.
For *Vice-President*— Miss Anna Stovall, San Francisco, Cal.
For *Secretary*— Miss Ella C. Elder, Buffalo, N. Y.

The Committee on Resolutions reported as follows:

Resolved, That the Kindergarten Department of the National Educational Association extends heartfelt thanks to Miss Florence Lawson, acting president and chairman of the Local Committee, and to the members of the Local Committee, for the many services so faithfully and efficiently rendered to this department.

Resolved, That thanks are due to the press of Los Angeles for the excellent reports of the work of the session and for notices of business meetings.

Resolved, That the thanks of the department be extended to the officers for their valuable services in planning and carrying out satisfactorily an ideal program.

Resolved, That we gratefully acknowledge the kindness of the Ebell Club in granting us the use of Ebell Hall for the meetings of the department.

Resolved, That thanks be extended to Mrs. Juana Neal for the hospitality of her home and grounds for our out-of-door reception.

Mrs. A. W. Dresser, New Jersey;
Miss Anna Stovall, California;
Miss Leila Terry, Wisconsin;
Committee.

The annual session closed with the singing of "God Be with You."

Mary F. Hall,
Secretary.

PAPERS AND DISCUSSIONS

ADDRESS OF WELCOME

BY MISS FLORENCE LAWSON, LOS ANGELES, CAL.

Again the National Educational Association comes to California, bridging the interval of eleven years with earnest effort and large achievement. Tho the association is for a second time in California, it is as remote from the former place of meeting as New York is from Charleston, S. C., and yet San Francisco and Los Angeles have a common bond in their kindergarten interests. Twenty years ago Miss Emma Marwedell, of Germany, came to Los Angeles from Washington, D. C., with letters from Miss Peabody. With the assistance of Mme. Severance, she established the first kindergarten on the coast. Her first graduate pupil was Kate Douglass Wiggin, with whose work in San Francisco all are familiar.

It is interesting to note that the adoption of kindergartens as a part of the public-school system in many of the large cities has been due to the efforts of a few earnest, thoughtful women, working together as an association and united by the tie of motherhood. Such is the history of the kindergarten in Los Angeles. The first stirring to life along these lines was due to the untiring efforts of Madame Caroline Severance, Mrs. Widney, and others. The Kindergarten Association was established in Los Angeles in 1885, with several schools and a training class under its charge. In the spring of 1889, thru the efforts of Mrs. Nora Mayhew and Mr. Friesner, then superintendent of city schools, the private kindergarten of Miss Olga Dorn, Mrs. Mayhew's sister, became the first public kindergarten of Los Angeles. In October, 1890, Mrs. Mayhew was

appointed supervisor of the eight kindergartens incorporated into the school system, with an enrollment of 422. The report of the past year shows the number of kindergartens to be thirty-nine, with an enrollment of 2,340 pupils and eighty-two teachers. Of the three large cities of the state of California, Los Angeles is the only one having public kindergartens.

There has been some discussion as to the advisability of entirely removing the kindergartens from the control of the association or private interests which founded it. In reply it is urged that by so doing political influence may be used in securing and retaining positions by incompetent kindergartners. If a certain standard of qualifications is established, and care is exercised by a reliable school board, such danger is reduced to a minimum, and the advantage of a firm financial foundation and of popular support over the sometimes uncertain interest and aid of an association is a very great one; but, as in every other question, there are arguments on both sides.

There has been great advance along kindergarten lines within the last few years. There had been a falling away from Froebel's simple spirit and life with the children, and an elaborate, and, in the main, unconscious, building up of schemes and plans full of detail and hindrances to child-growth. Instead of the oft-quoted maxim, "Come let us live with our children," it grew to be, "Come let us live with our ideas of children"—a vastly different proposition. But there has been a return of the pendulum, and we are coming back to the *spirit* of Froebel rather than to the *letter*.

With this return to nature and her teachings, what more ideal country than California, than our own city, with its background of foothills and mountains, its abundance of trees, flowers, fruit, and its easy access to the sea! True, we miss the changing foliage, the beauty and fun of the winter season, with its Jack Frost songs and stories; but the children do not regret the absence of what they have never experienced. The question is often asked: "What do you do with your program?" Well, if we have lost some of the established order dear to many kindergarten hearts, still we have the children, and a great out-of-door life with expanse of country, air, and sun; in other words, or one other word, climate. And now, in fulfillment of our earnest wish, you are here to share it with us.

We have as a body been subject to much criticism, and at times justly so, but that in itself is a help rather than a hindrance. Only that which has real merit can survive and profit by criticism. This the kindergarten has done, and this it must still do.

Not long since we were described by a prominent educator as a cult, and also as being occult in character. Surely that accusation can hardly be brought against us now. In April there was held in Chicago, under

the auspices of the Kindergarten College, one of the best educational meetings on record, the school of psychology. The meaning of that was that we do not intend to shun the light of research and pin our faith blindly to bygone creeds and dogmas, but do intend to work along the lines of advance suggested by psychologists and by the study of children.

Does not the very program so admirably prepared by our honored president indicate this? What does this mean? It means that we are not resting in self-satisfaction and complacency, but that we are alive, and keenly so, to the needs of childhood and to our own needs as kindergartners.

We are glad that you are here to inspire us to renewed effort. It means much to those of us this side of the mountains and desert to come in touch with you, to gain breadth of view, added insight, and a freshness of spirit as a consequence of this contact. We have not the beautiful architectural expression of a great nation's pride and public spirit to greet you, as had Washington with her department buildings, her capitol, and her wonderful library; we have not Lake Michigan, and the parks along the shores, of the Cream City, Milwaukee; nor have we all the advantages of art, literature, and social life of the older cities in the East. But we offer you, in their stead, a background of the picturesque Spaniard; the old missions and adobes; our rugged mountain scenery with trail and camp; our seacoast with its wealth of sea spoil and cooling waters; our fruits, flowers; all the possessions of our city — nay, our state — are at your disposal. And all the heartiness of welcome which characterized the California of '49 is extended to you today.

PRESIDENT'S ADDRESS

BY MARIA KRAUS-BOELTÉ, PRESIDENT OF THE DEPARTMENT

[READ BY MRS. A. W. DRESSER]

When the honor of election as president of this section was conferred upon me, I anticipated the pleasure of being with you on this great occasion, and my thoughts and preparations during the past year have been constantly in this direction. The deep regret of being deprived of this privilege I cannot sufficiently express; for I desired to meet you in person, telling you of my experiences during nearly forty years in behalf of the kindergarten; of the truths and spirit as imbibed directly from Froebel's widow; from Dr. Wichard Langé (Froebel's so-called spiritual son); from Dr. Langé's wife, who was Froebel's ideal kindergartner (Middendorf's daughter); also from Madame Rongé, London, England (one of Froebel's inspired pupils); and from Professor John Kraus, my

late husband, a true disciple and follower of Pestalozzi and Froebel, and one of the earliest pioneers of kindergarten methods in this country.

It was in 1872 that the kindergarten received its first public recognition in this country, and in 1873, at the meeting of the National Educational Association, the committee which had been appointed at the previous meeting to examine into the practicability of the principles advocated by Froebel reported in its favor. Professor John Kraus was a member of the committee, and I was invited, by choice of the large audience, to explain the principles, as may be seen from the report of that meeting.

Since 1873 the kindergarten has received due attention at the meetings of the National Educational Association, and several times it has been my privilege to address the association on this subject, which is fundamental to all education.

My plea in behalf of the kindergarten has always been for growth according to Froebelian ideas and methods, keeping to the unity and completeness of the educational means outlined by Froebel, yet continually adjusting those means to the new demands of the newer times. Progress and growth I have advocated at all times; but according to life-principles given us by Froebel. There is the exalted aim before us of leading the child to really feel himself to be the child of nature, of humanity, and of God.

As the kindergarten influences directly the parents and the home, so also the influence of the father and mother will go out to the kindergarten. The disciples of Froebel and the promoters of the kindergarten will, however, fail to accomplish the design of the founder until provision is made for the training of the mothers to the intelligent administration of motherhood.

As the true kindergartner seeks to know what precedes and what follows her own work with the children, seeking also to know the inner life of the child, she will receive gladly any light that can help her to a better understanding of child nature; and this help is given by the able men and women who devote themselves specially to child study.

The most appealing feature of the kindergarten is the child, his faith in you, his love and trust. When the soft little hand creeps into yours, when the innocent eyes are uplifted to yours, the heart seems to grow larger, and the feeling of responsibility resting on you would become almost overpowering were not love the tie, and "good common-sense" keeping guard.

Child nature, like a vine, must be pruned and trained, but the nature of the child must be understood by the educator as the nature of the vine is understood by the gardner, or else the pruning may do more harm than good. When the educator understands life, truth, and nature, she will proceed according to nature, and will study the divine in the child,

the nature of the child, assisting his development in a manner that will be in unison with the ways of nature and of God.

In the kindergarten the essential thing is the child, his nature, his growth, his development, his education; the effort of the child is considered of far greater importance than the result, which varies according to the ability already developed in the child.

The aim of the kindergarten method of training intended for young children up to the completion of the seventh year, when school-teaching proper should begin, is to prepare for all subsequent education. We are becoming aware how detrimental premature schooling is to the sound development of body and mind; how it destroys all freshness and all pleasure of learning.

Children allowed to develop during the first seven years by means of a gradual series of plays, exercises, occupations, instructive talks, and moral influences are led to see correctly, to listen intelligently, to acquire correct notions, to be interested in everything that surrounds them.

Much of the success of the kindergarten is negative, and consists in preventing harm. Its positive success is so simple that it cannot be expected to attract more notice than fresh air or pure water.

The first impressions of life are controlling for all subsequent periods. Harm may be prevented rather than cured; and character can be formed rather than re-formed, by keeping the thoughts on a high plane. The love for the beautiful, the love for truth, for nature, for our fellow-men, and for God are innate characteristics of the child, and, if not interfered with, will remain forever, and can be effectually strengthened by intelligent and thoughtful direction.

Nature creates in lawful freedom. The child's relation to nature, man, and God is yet instinctive, and will be to him as a dawning idea. These instinctive manifestations of natural impulses "serving for the development of all creatures" are assisted in the kindergarten by supplying, from the earliest period, external conditions favorable to healthy growth. The clear impressions received will later work into clear conceptions, by and by reproducing them in intelligent acts. The gifts and occupations of the kindergarten being based on this, the child learns that success of the whole, the result of his endeavors, always depends upon the exact arrangement or combination of the parts. It cannot be expected that the child should comprehend the abstract law of this; he is as unconscious of this as is the flower or plant growing by the law asserted in its kind. All the knowledge which the child thus acquires is experimental. Using this constantly, tho unconsciously, the fundamental law, by way of arrangement, classification, and combination, becomes a "life-element," laying a broad foundation for liberal culture. The followers of Froebel who fully understand the master's idea will help to develop the same independently according to their individual

characteristics, understanding and following the spirit, the idea, and not the word.

Each effort of the will strengthens the individual, if directed in the right channels; thus laws, together with freedom of choice, work benefits to the individual who strives to live within the former by the aid of the latter. All good education should follow the plan of allowing freedom with certain limitations.

I send my greeting, good wishes, and congratulations to the devoted kindergartners assembled at this great meeting. Twenty-six years ago we stood, so to speak, alone. Today it is entirely different. I will close my message to the sisterhood of kindergartners by repeating what an old, white-haired educator said to me after the meeting of 1873: "God bless the kindergarten!"

SOME CRITICISMS OF THE KINDERGARTEN

BY NICHOLAS MURRAY BUTLER, COLUMBIA UNIVERSITY, NEW YORK CITY

[STENOGRAPHICALLY REPORTED]

There are two well-known and easily distinguishable forms of educational criticism. There is, first of all, that of the censorious critic, who seeks for weaknesses in points of detail, who lacks equally a sense of proportion and a sense of humor, and who overlooks the fact that in the working out of great fundamental principles, not even the greatest of them flows to its full application without some slowing of the current or some eddy in the stream. Such is the criticism which tends to ridicule, to break down, to destroy, and it is wholly unworthy of attention in any form.

There is, on the other hand, a criticism which is sympathetic, which is appreciative, and which, with some insight into the aim and methods of an educational movement, points out ways and methods of strengthening and improving that movement with the declared purpose of building up a more enduring educational superstructure.

Having, as I have, so profound an admiration for the spirit, methods, and aim of the kindergarten, and being so absolutely convinced, not only of its excellence as an educational factor in its own place, but of its value as an inspiration to all education, it would be quite impossible for me to meet this department in any spirit but that of a kindly and constructive criticism.

You are, of course, familiar with the statement, often made, that the philosophies of Froebel and of Hegel, containing the deepest insights of the German philosophy of this century, are more popular in the United States than at home. The inference is drawn that Germany has

outgrown their inspiration and motive power; and the inference is equally suggested to us that we are trading here upon second-hand material. I do not believe that to be true. It is certainly true that the kindergarten is today upon a higher plane, is more efficient, more widespread, and more honored in America than in any other culture nation. I cannot interpret that fact to our discredit. It is equally true that the great seed-thought of Hegel — the evolution of the human spirit, reflecting the single principle, common alike to nature and to mind, which is rightly called divine — it is true that that seed-thought and that insight into life are more highly esteemed, more studied, and more fully applied today by American scholars than by those of any other nation. I cannot interpret that fact to our discredit. If Germany has seen fit to turn her face, in part at least, toward some gods which others can but consider false, and away from the wisest of her teachers, this will but fasten our hold the stronger on those truths of which we seem so sure.

One criticism which is made in a constructive spirit upon the work of the kindergarten is that it often exalts the letter above the spirit; that it tends to make static, definite, and permanent the forms of procedure, kinds of material, and methods of intellectual, moral, and social development, which are not ends in themselves, but rather rungs of a ladder by which the child-spirit climbs to a higher viewpoint from which outlook on life becomes broader and richer. There is basis for that criticism. One danger in which the kindergarten has stood lies in what may be called the worship of literal form as distinguished from exaltation of the spirit, which clothes itself in ever-varying forms. How has that come about when the real spirit of Froebel, like the real spirit of Hegel, is so clearly and surely a principle of development? There is only one answer to that question. It is because in some parts of this country the kindergarten movement, appealing to the philanthropic instinct of men and women not highly trained to think, has furnished them with educational material which they have seemed to understand, and with which they have too often been satisfied. In other words, the sure method of escape from that particular lowering of tone of kindergarten thought and practice lies in the one thing which the kindergartner most needs today — wider scholarship. It is too often supposed that because the kindergarten teacher is dealing with the very young child, an emptiness of mind, coupled with amiability of disposition, will suffice to direct the child's spiritual development. A stupid person may perhaps direct education at that stage where some adequate consciousness of the subject-matter is had by the scholar himself; but no wisdom is too great to deal with the young child, who can approach his subject-matter thru symbols only.

What is needed most today in this work is a higher standard of excellence in the training of kindergartners. I mean a broader general

preparation, a more widespread conviction as to the importance of thoro preparation. The resources of literature, science, art, and music must, so far as is consistent and practicable, be drawn upon to the largest possible extent. It is all well enough to learn, partly by instruction and partly by a period of apprenticeship, something of the mode of kindergarten procedure. But unless that procedure be inspired and illuminated by a grasp upon general culture and modern scientific information, nothing but a formal education will result.

Too many low-standard kindergarten training classes are at the bottom of some of our faults. They have low standards of admission, low ideals of training, and are too often satisfied with training in technique and form, trusting that time will repair the damage or experience remove it. That kindergarten teacher who is not constantly and continually a student, and a student along those great lines of human effort which I have named, will sooner or later dry up her inspiration at its source. First of all she must have scholarship, not only in entering upon the work, but afterward as well; a constant and broader study, which is truly philosophic, because comparative, and because it puts itself under the guidance of the best teachers; one which is also practical in the highest sense because it brings its resources to a focus every morning in the kindergarten room.

Another criticism which is sometimes made, and with which my observation leads me to find myself in sympathy, is that the kindergarten is often attached in an external manner to an organic scheme or school system, and is not conceived as an integral part of one process of child development. It was easy for such a condition to come about, because the kindergarten, in its conception, represented ideas which were wholly strange to the schoolmaster's mind. The kindergartners were, therefore, thrown back upon themselves, and incrusted themselves with a shell for protection. It is now necessary for us to make sure that the shell does not stiffen and harden, making growth impossible.

It is easy to mark off in large periods all development of the human mind. It is easy enough to mark off in large periods all growth of the human body. But who ever saw the body or mind grow? The subtle process goes on before our eyes, wholly unseen, unobserved. It does not obey any arithmetical law; it is not subject to precise measurement or to scientific observation. We gather up those things which we call marks of progress, but we are unable to put our hand on the point where one stage passes into the other. Therefore the educational scheme which tries to base itself upon hard-and-fast periods is false to the vital principle of growth.

It is impossible to say how many years are necessary, in every case, for kindergarten instruction. I am confident that in the cases of some children the symbolic period may be passed in one-half the time that

other children may take; and we, believing in the principle of individuality and preaching it to others, must not fail to apply it to ourselves. This means that the child must be released for the elementary school as soon as he is ready for it, but no sooner, so far as we are able to observe and know.

I am inclined to resist the contention that the kindergarten is a course of study. I have no objection to "courses of study," in the sense in which the term is often used; but I object very much to the theory that the child who is able to take the third step must not be allowed to take it because he has not taken the second. I believe the human mind in education should always be put at that task for which it is competent; and it is "pedagogical," not educational, to insist that every step be covered, no matter at what expenditure of time, when the power to advance more rapidly is present. Therefore, it is necessary for the kindergarten to beware of holding children back. We do not want the elementary school to hold back those who are ready for the high school; we do not want the high school to hold back those who are ready for college; or the college, those who are ready for the university. We cannot put the child of three to seven years of age in a strait-jacket and say that there he must stay for a fixed time, regardless of his natural ability or accomplishments.

Because the line of demarkation is so difficult to establish, it has become the duty of the kindergartner to acquaint herself in a general way (it is impossible to do it in detail) with the principles, methods, and ideals of the elementary school. There must be the most absolute sympathy between the kindergarten and the grades above it; and we are in these days rightly calling upon teachers of the lower grades of the elementary school to master the spirit of the followers of Froebel. Sympathy comes from mutual understanding and knowledge. In this way the kindergarten will become attached to the school, and no longer be a separate and distinct part of the educational scheme; it will take its natural place as one of the various stages in the growth of one living and organic human mind.

I know that there is a great demand that those who go into the kindergarten work shall know the principles of elementary-school teaching, and that elementary teachers shall go into the schools with a knowledge of the work and purposes of the kindergarten. This demand is made by the best educational sentiment and opinion. It remains for kindergartners to do their share in satisfying that demand by studying the principles of elementary-school work and by occasionally supplying elementary teachers from their own ranks.

It is sometimes said that the kindergarten is at war with the home; that these children of tender years should be under their mothers' care; that it is unnatural for children of that age to be brought together

in groups for instruction, however needful it may be. I hold the contrary opinion. I think that of all forms of educational work, none has been so successful, as yet, in reaching and uplifting the home, as the kindergarten; and the kindergarten which does not have a mothers' class attached to it is not a kindergarten in the best sense of the word.

Again, we sometimes hear it said that the kindergarten is an admirable thing for the children of the poor; that their children are neglected, dirty, unkempt, uncared for; that the children of the well-to-do need not be found in the kindergarten. In the first place, I resent such a distinction as wholly undemocratic and uneducational. In the second place, looking forward as I do to the next great educational problem of this country, which will be, not the education of the poor, but the education of the rich, I am forced to wonder how the children of the rich can afford to be without the advantages of the kindergarten. It is a serious thing when, in our social and economic efforts, a line of class distinction is drawn. We have only to look at England to see how, with her high ideals, great opportunities, and large expenditures for education, the people find themselves hampered at every turn in striving to effect reforms, by social and economic distinctions. We must not allow these to enter into our educational work.

One more point is important because in that particular the kindergarten is widely misunderstood. You hear the criticism from the elementary-school teacher, made with the best of intentions, but from what I hold to be a wrong point of view, that the kindergarten is disorderly, that it has not the discipline and the definiteness of routine of the elementary school. The kindergarten is, therefore, held to be a disintegrating influence in the development of the child, and to increase the task of discipline later on. My reply to this criticism is that it arises from what seems to me to be a wholly false conception of discipline or order. Suppose an observer passing over this busy city in a balloon were able to look down upon its crowded streets, on which men and women are passing and repassing in every direction, each going to his appointed task without interfering with his fellow; would such a scene be one of disorder, because the human beings within the observer's field of vision were not massed in phalanx and controlled in a mass by a military drill-master? I think not. The scene would be one of a very high type of order indeed, one much higher, in fact, than the order of a marching regiment. Order is not an external form, but an inner habit—the habit of going in a purposeful way, with regard to the purposes and rights of others, about some definite thing, even tho the lines cross and recross. To substitute for this high type of order a single, definite form is to substitute the order which is death for the order which is life; and my response to such criticism is that I should prefer to see more of the

kindergarten order in the lower grades of the elementary school and less of the elementary-school order in the kindergarten.

Let me say in conclusion that it is a striking fact, and one of the most hopeful signs to be found today in all education, that the two extremes of the educational process, the kindergarten and the university, are the two greatest conservators of individualism; and it is only as the individual is being rescued from the routine of the intervening school periods that these periods are rising to perfection and efficiency. The great hope of our school system lies in the fact that the spirit of individualism is working down from the university and up from the kindergarten, and that some day the two lines of development will meet and will hold the whole educational process within their spheres of influence.

CHARACTER STUDY IN THE KINDERGARTEN

BY PROFESSOR THOMAS P. BAILEY, JR., UNIVERSITY OF CALIFORNIA

Now that child study is no longer new and strange and "epoch-making," but rather an ordinary and inevitable part of all educational work, we ought to begin to see some of its results in our school practice, and particularly in the kindergarten, which has always claimed to be based upon the results of an intimate knowledge of child nature. The somewhat hysterical claim that we have totally misunderstood the child in the past is being softened into the admission that men have always understood children just about as well as they have understood adults. Child nature is no longer regarded as something essentially different from what thoughtful people thought it to be. We are beginning to realize that our knowledge of the children is very largely dependent on our study of ourselves. Socrates was a student of children, and Dr. G. Stanley Hall is most delightful when he is most Socratic. Jesus told us once for all that the childlike is the heavenly. Pestalozzi and Froebel found a divine law of development in the child, and Herbart saw in him the drama of the history of culture. Child study is good because it is both old and new, scientific and philosophical, particular aud universal. The present status of child study is in large measure a triumph of the kindergarten, for its sanest theory and practice have always taken child nature into account, even when its theory was vague and its practice merely traditional. I confess to some sympathy with those kindergartners who resent being told that the kindergarten is a good thing, but that its methods must be entirely revolutionized and reformed in accordance with the results of child study. Very often it has happened that trivial criticisms have taken the place of careful inquiry and catholic sympathy. Kindergartners are themselves

in part responsible for such treatment. They too often oppose sentimental vaporings to pseudo-scientific vagaries. Moreover, they sometimes give the impression of a quarrel between rival patent-medicine vendors or spiritualistic mediums — at least of those "mediums" not believed in by eminent psychologists and kindergartners. "Envy, hatred, and malice, and all uncharitableness," ought to be far from the mental attitude of the disciples of Froebel. All such expressions as "behind the times," "doesn't understand the real Froebel," "not properly trained," etc., are not apt to advance the cause of the kindergarten, especially when it is a well-known fact that there is no way of deciding who is right in these contentions. In this paper I want it understood that I am not criticising any particular kindergartens; nor am I standing sponsor for anyone's theory or practice. While I have been so fortunate as to be able to work with a kindergartner so level-headed and intelligent as Mrs. Frances Bracken Gould, we are not to be held responsible for each other's sins of omission or commission in kindergarten matters. I shall use data from her kindergarten, because I know most about it and can vouch for the facts I have collected.

At least three kinds of mental attitude, based upon three theories, are to be found among those kindergarten theorists and practitioners whom I have met. It is perfectly permissible for anyone interested to claim that I have not met the true exponents of the true kindergarten. But if I am allowed to classify my no doubt sadly inadequate knowledge on the subject, I should name the aforementioned kinds of attitude the angelic, the neuromuscular, and the recapitulatory. These are not intended as nicknames, but as terms descriptive of theories or hypotheses. Let us briefly review each.

1. *The angelic theory.*—The child is regarded as a dreamer about infinity and eternity. It comes perfect from the hands of the Creator and is corrupted only in the hands of man. Wonderful spiritual insight has this child, and it is thereby enabled to divine the inner significance of things mundane with the aid of the prophetic and priestly guidance of the kindergartner. There is great truth in this view, when it is divested of sentimentalism and some other isms; but I cannot see that any progress in understanding child nature is likely to come from people who know so very much about the ultimate realities that philosophers have such a hard time trying to understand. The "angelic" class always expresses scornful sympathy for persons like myself who do not enter into the fullness of the divinity that doth hedge about a child. I have a pious faith that the children's angels do always behold the face of the Father, but I am not so sure about the children themselves — at least in the rough. Nor am I so sure that the kindergarten angelicizing process improves the raw material very much. Perhaps I lack the right kind of imagination, or perhaps my tastes in such matters are unrefined. It does

seem a pity to try to eliminate the natural egoism of childhood too soon. One misses the gamy flavor of the wild animal. The angelic child is tame. It is like some rejected manuscripts in being "meritorious, but not available for our purposes."

2. *The neuromuscular theory.*—The child, according to this theory, is a bundle of reflex arcs, waiting to be joined together into more complex reflex arcs. Properly graded stimuli will do the work. If the "fundamental" comes before the "accessory," all will be well. Childish eccentricities are due to ancestral experience. As we know very definitely what that was, we are able to educate the children very definitely on account of this knowledge. This theory is a full and sufficient antidote for the angelic theory. That is one of its chief uses. Persons holding to it need, however, a good dose of that for which their own theory is an antidote. It is possible to hold to both theories. It is easy to form "higher syntheses" in kindergarten theories.

3. *The recapitulation theory.*—The child is supposed to recapitulate the history of the racial development. The instincts of the race appear in a more or less generalized form in the development of the individual. In this theory the culture-epoch idea has taken on a biological form. It is often forgotten that recapitulation is only one of many factors in development, and that the civilized child is to be compared, not with the adult savage, but rather with the savage child. The adult savage is childish rather than childlike. He is often degenerate, and at best his life is one-sided rather than typically human. One of our main efforts ought to be to save the child from recapitulating too much of the race's history. The eternal childlike is not to be found in past or present savagery. Before this view can be of much use to the kindergarten it must undergo much criticism and much restatement in the light of a more comprehensive study of the manifold phases of character life. Such study is now being carried on in several quarters.

The above classification of views is not intended to be exhaustive. The various ideas are not necessarily mutually exclusive. The theories are not adequately stated. I am perfectly willing, however, to have anyone so disposed prove the futility of such classifications, and to see in them nothing but an attack of persons differing from me in methods and results. Perhaps I can best show the relation of my own thought to the above-mentioned attitudes by pointing out their mutual complementariness, rather than by attempting to unite them in a higher synthesis.

Everyone is supposed to be able to state the object of education in several different ways. Let me exercise my privilege by using a few pet phrases. The object of education is to train for habitude, nurture for generic instinct, and develop for individual aptitude. The neuromuscular theory lays emphasis on the training of habits. We must put the principal of our experience at interest. Habit (including custom and law) is

a capitalization of life-process. The nurture of instinct is the principal interest of the recapitulation theory. We must be sensitive to the stimuli that make for survival. The catholic traits of the race furnish us with the resistant stock on which to graft the tender shoots of a higher life. The angelic theory is fond of reminding us of the child's right to have its talents developed, its "spontaneity" respected. Spontaneous variations are mysterious. No wonder the angelicals regard them with reverence. So, you see, I am not so wicked, after all, but find a place for all these views in the very object of education. I think all of them need reforming. My own views are all the time being revised. This is the fate of all uninspired things. Even Bible versions have to be revised.

Let us briefly review the work of the kindergarten in forming habits. I am afraid that some kindergartners do not realize the vast importance of habit as a preparation for the exercise of spontaneity. By habit or habitude I do not mean muscle-tricks only, but the great character-rhythms that keep the child's life orderly and make for *faculty*. The three great habitudes I want to mention are: the self-assertive, the sympathetic, and the psychical. These belong together and ought to be organically related in the kindergarten training. Self-assertion is perhaps normally most prominent at this age, but ought to be limited and controlled by sympathy and mental alertness. Psychical instincts, such as curiosity, love of sensation, etc., sporadic sympathy, self-assertion, and psychicality, are not enough. They must become structural. I hope to illustrate these statements later.

The most generic instincts or adaptive tendencies of this period seem to be the appropriative, the gregarious, and the playful. These ought to become well-nurtured, so that they may respond to the industrial and social and personal environments. I need say little to kindergartners about the importance of play. But play is both creative and recreative. The creative is predominantly individual and appropriative, while the recreative is largely social and gregarious. Individual industry and the beginnings of the property sense ought to go along with the sense of social solidarity and responsibility that can be given and nurtured best by the play that is primarily gregarious. The beginnings of the life of industrial civilization, of organized society, of personal culture, ought to be vitally connected with one another, and with the life of habitude and talent. If the instincts furnish the food or content element of education, the habitudes give the regular labor that gets the food and gives an appetite. Form and content, habit and instinct, are only phases of a total concrete-generic life.

Spontaneity, somewhat irresponsible and frequently irrational, is the unknown quantity and quality in the child's character equation. Hence it is the most talked about and the least respected in practice. Spontaneity without habit-training and instinct-nurture is caprice and

lawlessness. Every child has the right to put its best foot foremost, but only on the condition that there is rhythmical walking to some purpose.

I cannot hope that what I have said will be very intelligible without copious illustration, but must content myself with devoting the rest of this paper to a few typical cases which I can vouch for. They are taken largely from Mrs. Gould's notes, and are expressed, as far as possible, in her rather picturesque language. They were not written for publication, but Mrs. Gould will pardon this use of unpremeditated character sketches.

Case 1.— A., a girl, four and one-half years old, strong, well-kept, well-nurtured, neat, bright, very self-assertive, ruled an older tho weaker sister with a rod of iron; worked very capably at a few things that struck her fancy; would then sit back in her chair, cast down her eyes, and sulk; her face would redden, she would not talk, refused to play or mingle with the other children; never smiled spontaneously.

In her own mind the teacher never slackened for a moment in the idea that A.'s extreme self-assertion must be drafted off methodically into sympathy and psychicality. In the first place she had to work, and work to the best of her ability, every minute of the required period. Gradually sulks, watery eyes, and red face disappeared during the work period. She took pride in her work, and the psychical instinct functioned normally, and drew off some of the excessive self-assertion. Again, she was required to mingle with the children, exercise and play in all the class exercises, and was called in many times to help more backward children.

At the end of the school year A. was one of the most capable workers at the table. She attended strictly to business, bringing forth most creditable workmanlike results in less than the required time, so that she was able to choose her own occupation for a portion of the short work time. So well had the psychical habit developed itself.

On the other hand, she had developed into the most noticeably sympathetic child in the room. No little stranger came now into the class but that A. had his hand in hers, initiating him into the various school mysteries. On the playground at recess she would be especially careful and thoughtful of the newcomer. Among the other children she became the gayest of the gay, playful as a kitten, yet always self-contained and her sweet little individual self.

Case 2.— B., a big, flabby, very dirty, six-year-old boy; as to clothes, decidedly ragbaggy; a very old face; singularly rapid speech; tongue flies up and down rapidly in his mouth when he talks. It is really funny to watch him. He is decidedly sympathetic in his habits; so friendly, so social, kind, pleasant, never ruffled; doesn't care whether "school keeps" or not; "Everything is all right anyway." If by chance he happens to be struck, when out in the yard, he is never in the least angry. He may weep a watery tear or two, but that is all. To put some starch into B.'s backbone, to try to establish psychical and self-assertive reaction, has been a herculean task. After five months I found that if I cut him entirely loose from his habitual sympathetic reaction, one time out of three he surprised me with his all-round capability. His spine has really gathered enough starch, so that he can do his work well in the appointed time, and with an absorbing attention. He has a little bit of established psychical brain structure. The appropriative instinct is setting up action, and B. is so pleased with the feeling he gets from successful effort that his dull, flabby face is quite irradiated.

This boy's case is peculiarly discouraging, because he is so pathological. The father is brutal and domineering, while the mother, tho of a better class, is completely crushed. The boy has bread and wine for both breakfast and lunch.

Case 3.—C., a beautiful little girl of five, a charming little fairy; the only child of well-to-do, cultivated parents; carefully reared, indeed entirely too tenderly. She is a

bright child, but too dainty and finicky. She is stocky; but the romping quality is wanting. She whines at times; is self-assertive, with psychical and sympathetic instincts fairly well-developed. She could stand on her own individuality sufficiently; worked well, and attended to her own business in a workmanlike way when necessary, and was also sweet and sympathetic to me and to the individual children. But to be lost sight of in the lump of children almost killed C. When it came to playing in a common herd, a social aggregate, C.'s gregarious instinct was not in good working order. Her face would cloud at once and work convulsively. Then would come a burst of passionate weeping. No attention would be paid to her until finally she would run to the teacher, bury her head in the teacher's lap, and cry out: "I can't have the children play that. I want them to play something else." The teacher would answer calmly: "C., the children are going to play what *they* want to, and you must play with them nicely." "O, I can't, I can't! I don't want them to play all together." "C., you must;" and the teacher would hold her close while the storm raged, and sob followed sob. After the worst was over, the teacher would say: "Now, C., when you can stop crying and make up your mind to go back to the children, and play what they play, and do what they do, you may dry your eyes and look at them." Gradually she could look up with a faint little smile. She was given some efficacious cold-water medicine in the form of a drink and a face bath, and she was all right. By and by she could look at the teacher with a sunny smile and say: "Now I *want* the children to do as they wish." She had had a lesson in democracy. After a while C. was far less nervous and fussy, and had no more storms.

DISCUSSION

WILLIAM N. HAILMANN, superintendent of schools, Dayton, O.— It is to me an inspiration to witness the marvelous success of your department and of the educational movement it represents. I remember the days of its inception: the National Educational Association meeting of 1872 at Boston, when I had the privilege of reading the first paper on the kindergarten presented before the organization; my struggles as editor of the *Kindergarten Messenger;* my efforts to secure the establishment of the Kindergarten Department of the National Educational Association; my ultimate success at Madison; the subsequent rapid development and growth of the department. You can appreciate the joy that fills my heart when I see you now the hosts of the best, who always feel honored to become your guests.

The words spoken here today are fraught with encouragement and hope, with high appreciation of your work, and with bright prophecies of the growing influence of Froebel's gospel of life in the work of school and college.

I am ready to receive with grateful "Amen" almost every word that has been spoken here this afternoon. Yet I cannot refrain from uttering a word of warning or caution with reference to a single point. Dr. Butler, in his excellent address, emphasized the importance of scholarship to the kindergartner. In this, of course, we can all agree with him. The more the kindergartner knows and the better she knows, the more effective — other things being equal — she will be in her work. I cannot, however, agree with his proposition that scholarship is the first requisite of successful work. On the contary, I can foresee from such a position only pernicious results for the development of the kindergarten.

The first requisite of successful work on the part of the kindergartner lies not in the head, but in the heart. Knowledge and skill are, indeed, indispensable to her; yet these are secondary to the purpose that fills her heart.

I do not say this to deprecate scholarship, but simply to assign to it its true place in the order of requisites. I am aware of the fact that without knowledge the heart often goes astray or wastes energy. But I am also aware of the fact that the heart, the true loving heart of a Pestalozzi or a Froebel, the marvelous heart of the mother, will seek and gain whatever knowledge or skill is to them indispensable. I am aware of the fact that, while knowledge and skill may remain forever heartless, the heart that is filled with love will steadily grow in the knowledge and skill that are needed for the achievement of its purpose.

In themselves knowledge and skill are vain, the children of a day; but purpose, attitude, is the first-born of the eternal will; if need be, it will conquer knowledge and create skill, in order to gratify the yearnings of the soul.

To the heart, then, to attitude, to the "amiability" which Dr. Butler would degrade in the interest of scholarship, belongs the first place among the requisites for successful work on the part of the kindergartner.

I am glad to have an opportunity to make this protest against a pernicious tendency that runs thru all the educational work. Everywhere we find this inordinate, godless worship of scholarship. It would preserve in our elementary schools the fads of spelling and grammar, of courses of study and text-books, of recitation and competition in scholarship as the highest goal. It would begin the high school with the seventh grade. It would close admission to the divine calling of teaching to all but college men. In short, it would bow in worship to the golden calf of ephemeral, perishable learning, and deny the living God of loving efficiency.

What we called knowledge yesterday is ignorance today; what we name knowledge today will be ignorance tomorrow. Shall we worship this uncertain, changing thing, or trust ourselves to love which never dies, which is ever at its best, and which will lead us nearer and nearer to the truth that makes us free?

RELATION OF IMITATION TO ORIGINALITY AND CONSEQUENT FREEDOM

BY MARY F. LEDYARD, SUPERVISOR OF KINDERGARTENS, LOS ANGELES, CAL.

This nineteenth century has been plainly the era of the question. No man today accepts a fact simply because someone else believes it to be true, or because there is a tradition to such an effect. Each thinking mind wishes to investigate, to reason and conclude for itself. And it is fortunate for the world that the star chamber and the Inquisition are past; else there would be plenty of occupation for the rack, the fagot, and the thumb-screw. And this is a hopeful sign, surely, for it shows that man has come into a freer atmosphere and a wider view.

In taking up the question of the relation of imitation to originality and consequent freedom, let us first clearly understand what is meant by the terms we use. What is imitation, what is originality, what the consequent freedom? "Imitation," says Compayre, "is the reproduction of what one has seen another do; it is, therefore, an act of assimilation." Originality marks the point where "external authority has become inward

freedom," where the principle and method underlying an action are made clear, and the self-active being is emancipated, in so far as he has been able to fully assimilate, recreate, and recombine. The kind of freedom consequent upon this may be defined as "freedom under the law"—a freedom which is the freest thing in the world, for it is the result of the most perfectly disciplined, balanced, and controlled powers. This freedom is the perfected fruit growing upon the stalk of imitation and coming from the flower of originality.

Now let us look at the subject of imitation a little more closely; let us see what effect it has upon the problems we must meet as educators. We have not time to go deeply into the phenomena of the imitative instinct in young children. Of course, the order of development is first thru spontaneous activity of the muscles, then thru the exercise of the sense-perceptions, and lastly thru the intellect. But, as someone says, "the river of childhood does, indeed, run by our doors, but the springs that feed it are mostly beyond our horizon; we cannot begin at its sources because we do not know them yet. They are precisely what we are trying to discover, and our only way is to note in which way the current flows, and then follow it up as best we can."

Basing our argument upon the hypothesis, so generally accepted, that civilization is little more than a series of imitations, we are first of all reminded that the instinctive imitation of the child is something for the schools to take note of and give serious thought to. Imitate he will. And what shall he imitate? Here, on the one hand, is barbarism; up there is the highest pinnacle of civilization yet reached. Now, anywhere between the two the child may strike out. He has a great power of imitation, and he may imitate laziness, cruelty, lying, and stealing; he is just as likely to imitate these as something good; he has power to imitate in all these directions. What we must do is to conserve these powers of the child to his best good; recognize this instinctive faculty as a very strong factor in his growth and educate it.

At first the young child has very little idea of the method and purpose of his actions; in fact, there is very little purpose in them. He yearns to express himself; he longs to do what he sees others doing; and, usually, he will scrupulously imitate details and often lose sight of the chief idea of a thing. Here is a warning to teachers: nothing is insignificant, nothing unimportant; everything placed before the child must be just as fine as it can be made, so that whatever handle he may take hold of, from whatever angle he may approach it, good will result, his soul-growth will be fostered. "We must not lose sight of the essential fact," says Dr. William T. Harris, "that shows itself even in the most rudimentary of the phenomena of imitation. There can be no imitation whatever except on the part of self-active beings;" in other words, "only souls can imitate." "There is an element of originality in the most

mechanical phase of imitation." He goes on to say: "The self is active and assimilative. It sees an external deed which it proceeds to make its own through imitation." How conspicuous a feature this is thruout the instinctive plays of childhood! He lays hold of that which is beyond him thru imitating the dress, manners, and habits of his elders — he plays at being a man. And what does this mean? It is simply an expression of the yearning of the soul of the child to reach out and grasp and assimilate something beyond and outside of himself — to take on the symbol, at least, of power and freedom. The feeble-minded do not evince this desire, and so long as we check it in the normal child, or do not give it an opportunity for free expression, we are checking a God-given, soul-elevating instinct which should be utilized. On the other hand, this natural self-exaltation may play a very damaging part in the case of an extremely precocious child; but such instances must be rare. As the child seeks to reproduce that which he sees going on about him, he naturally falls into the dramatic representation,

> "Filling from time to time his humorous stage
> With all the persons, down to palsied age,
> That Life brings with her in her equipage."

"Thus in imitative play," E. H. Russell says, "the child epitomizes and rehearses the fundamental experiences of the race; at the same time as he is sounding the shoals and depths of his own nascent powers, and thereby preparing day by day to take part in the real work of life which the coming years will bring." Play is thus seen to be at once reminiscent and anticipatory — a welding of the future to the past.

Thus we find this God-given imitative power expressed chiefly at first thru play, "for play is child's most earnest work," eventually forming the most important element in his development; and any educational scheme which disregards it falls far short of success. If wisely guided, this instinct of imitation will draw to the surface all the most delicate tendrils of the child's spiritual nature and so strengthen, by entwining themselves about the foundation of character and mind structure, that no power or upheaval in future years can tear them away.

Froebel, realizing this, seized upon the great principle of creative activity. He recognized and educated the imitative faculty to a point where new combinations were possible, and where the impulse to discover and reconstruct meets the purely imitative impulse, and then leads on to what the child may feel to be discovery, tho it may only be the product of a duel between two imitations. James Mark Baldwin says: "The growth of self is seen in the growth of the child's demand that his results shall show constantly more independence of the external copy."

If our kindergarten system, of which we boast so much, and from which we expect so much, is worth anything, it is going to bring about a more clear-sighted analysis and understanding of the very young child;

it is going to put into the hearts and hands of the teachers of children the tools by which they may carve out, not a new heaven and a new earth, perhaps, but means by which this earth may be made more heavenly, methods by which the natural powers and instincts of the child may be more fully understood and utilized, and the controlling, creating, originating powers brought to light thru natural means.

But we must be on our guard. Originality and creative power are good, but they have their limitations also. There may be an originality which makes for the well-being of neither the race nor the individual. As we have seen, the child is just as apt to strike out at one point as at another in his struggle for freedom; and, knowing nothing now about freedom under the law, he is as apt to destroy himself or another thru unguided, misdirected effort as to do anything else.

Let us do away with false sentimentality in our manner of looking at the child, and strive in all earnestness to meet his real needs in a real, practical way, and so direct these energies that they may not be lost—indeed, that not a precious moment of this most important formative period may go to waste. I believe the study of just this period of the child's life holds the richest store of treasure for the honest investigator that can be found anywhere, and I also believe that the half has never yet been told. How does the history of the race bear us out in this? Modern civilization is but an imitation of the civilizations of Greece and Rome in variously modified forms. We are but a product of all that has gone before, combined and recombined. By the winnowing of years, some beliefs or customs are dropped out; others rise to take their place. Giddings says:

> Our complex life is a struggle for existence among imitations. For example, certain patterns and colors of clothing, certain methods of building, and certain forms of speech, particular amusements, beliefs, etc., show an astonishing power to fascinate. They spread and persist, while other forms are quickly forgotten. This results in a general blending of diverse elements, and in common modes of thought, common standards of living.

Imitation, while it softens old conflicts, creates new ones, and a duel of imitations occurs in which one or the other is overcome and an invention results, in nature or essence unlike either, possibly, but still the product of the struggle between the two imitations. Spencer's theory that "the discoverer's ability is the product of past circumstances" does not conflict with Mallock's idea that "man inherits the past only so far as he can assimilate it," and so the inventions and achievements of the past are the property of those who can use them and conserve them to the advancement of their fellow-men.

This principle is not confined in its limit to brain power alone. The most wonderful intellect, the most brilliant imagination, may lack the skill of hand to execute, tho able to catch the exquisite new combination, or the transcendentally beautiful thought. He needs the skilled hand to

apply the invention or creation to man's needs. This is notably illustrated in the case of the wizard Edison. Tho the principles of applied electricity are his, he would be powerless without the skilled fingers of his workmen to make permanent the thought. MacAlister says:

> The hand is the most wondrous instrument in the world, it is the necessary complement of the mind in dealing with matter in varied forms. It is the hand that rounded St. Paul's dome; it is the hand that carved those statues in marble and bronze, that painted those pictures in palace and church, which we travel into distant lands to admire; it is the hand that builds the ships which sail the sea laden with the commerce of the world; it is the hand that constructs machinery which moves the busy industries of this age of electricity and steam — it is the hand that enables the mind to realize in a thousand ways its highest imaginings, its profoundest reasonings, and its most practical inventions.

Rebecca Harding Davis pertinently asks: "When will Americans see that there is no blessing like the education which we can use; but that the education which we cannot use is a curse?" They are just beginning to see it, and a few years hence the entire system of public education in this country will be revolutionized.

The truest benefactors of the race have been those who could not only bring forth a new idea, but could so conserve it to the economical needs of man as to place him upon a higher plane of living, thru its introduction. That, to my mind, is the freedom that the great man buys for us by expending brain and vital thought. And why are such men so rare? Is it true, as some claim, that the entire race is living upon a higher plane than formerly, and so the few great of earth are not apt to tower so conspicuously? If so, *good!* Spencer divides the race into the "clever, the ordinary, and the stupid." Of course, the progress of the race toward freedom depended, and still depends, upon the clever; and he further assures us that they are the "scattered few."

Those that have, thru imitation, caught the spirit and achievements of the past, assimilated them to such a degree that they have made them a part of their very being, and building thereon have produced a new adjustment, combination, or product, have thus opened a new door, and let in new light upon the world. Such are freed men.

MENTAL AND MORAL DEVELOPMENT OF THE KINDERGARTEN CHILD

BY C. C. VAN LIEW, STATE NORMAL SCHOOL, LOS ANGELES, CAL.

As the conscious efforts of education have descended more and more to the earliest years of childhood, they have often carried with them an attempt to modify the child to a precocious fitness to his environment. The adult educator has usually had well in view only the end of his work

as determined by adult society—not the conditions which the laws of growth impose upon him. Hence we often come to a consciousness of attempting some things in vain. With all our refinement of methods, furthermore, and with all our enrichment of the curriculum, we find it difficult to point out just wherein the product of hothouse culture possesses power essentially superior to that of the individual who has enjoyed a larger measure of wild, free, instinctive growth, and only a limited amount of arbitrary modification.

But our experiences here have been very valuable, for they have taught us in an indefinite sort of way that somewhere, somehow, education is strictly limited. Finally we have begun to turn our eyes more seriously toward the main source of these conditions and limitations, the child.

The kindergarten has not been wholly free from attempts at precocious modification, altho the philosophy of its founder has always brought his followers close to child nature. I suspect that the difficulty, in so far as one exists, depends upon the conception which I have already noted above as common to all primary education. We try to construct a bridge from the individual child to adult society, and to make it as short as possible. But, in the light of modern biology and child study, we must admit that this bridge cannot be shortened. In fact, nature seems to have taken pains in the human individual to lengthen it. With us infancy, childhood, and youth occupy about one-third of life. They mean not only a long period of openness to impressions, of receptivity; but also one which is genetic, subject to laws of unfolding and succession. However roughly and imperfectly we conceive it at present, there is an order of development, each step of which is conditioned by its predecessor, and conditions its successor. In dealing with these conditions it is always the problem of education to favor each step in development in its own place. Any attempt at precocious development of any power is equivalent to an attempt to produce a high order of action upon a narrow basis of experience.

Yet it is most difficult to secure a recognition of this condition of educational growth in practice. For example, to touch more closely the question of the kindergarten age, Miss Harrison tells us (see *Home and School Education*, June, 1899, p. 510): "When we realize that the tools of the kindergarten make the child conscious of evolution in nature and of geometric construction in the works of man, we then, and then only, begin to realize the greatness of Froebel's gifts and occupation." Assuming this statement to be correct, that geometry, for example, may make the child conscious of evolution in nature, the statement, implying as it does, together with its context, that this is their function in the kindergarten age, ignores such questions as these: How broad a basis of experience with life and the world is it desirable to have to become conscious of evolution in nature? How much of that basic experience does the

child acquire in the two or three kindergarten years? At just what age ought the child to come to such broad, abstract, and highly organized interpretation, or even consciousness, of evolution in nature? Has it been demonstrated to belong to the kindergarten age?

Similarly the very simple, crude sense-symbolism of the little child has been, and still is, used to defend the practice of mystic, æsthetic, and ethical symbolism in the kindergarten. No one will deny the vast presence and import of symbolism in all human life, thought, and production. But that is not the moot question. In all the profound philosophic discussions upon the value and import of symbolism which I have met, there is not a word which answers the question as to just how much and what kind of symbolism belongs to the three years of kindergarten training.

These examples, and others, betoken, it seems to me, two defects in the ordinary approach to the problem of training the kindergarten child: (1) a tendency to interpret the child's nature to fit a philosophy which has gone before, and (2) but slight consciousness of the true *genetic* problem in child-growth. Let us, in the first place, then, institute no educative processes that have not an unquestioned foundation in the nature of the child; in the second, let us remember that the kindergarten period is closely related to the whole genetic movement of the child's life; that its solution does not mean a safe solution of the whole life of the child (as we so often hear), but of only one period, which may then favorably condition later periods; that it possesses no *definitive* reach beyond itself. In general, therefore, two things are needed by kindergartners in their present practical attack of the problem. These seem to me to be (1) more unbiased, concrete study of the simple and normal phenomena of child life; (2) a broader study of the whole problem and period of education, especially of the relations of their period to others, to prevent exclusivism and isolation in practice.

It is the further function of this paper to suggest some thoughts upon the mental and moral traits of the kindergarten child, and upon the teacher's attitude in practice toward these traits.

If, now, we assume that the kindergarten age covers the years from three to six, we see that it follows closely the period of infancy which covers the first three years. Some of the characteristics of infancy are still prominent in the kindergarten age. Infancy is dependent for its development largely upon the spinal cord and the lowest brain centers. It is a period of relatively marvelous increase in weight and stature physically. The problem of nutrition is dominant in infancy. There is some awakening and activity of the senses, tho they have hardly reached their most marked period of nascency. Powers of movement have unfolded along the line of the very oldest heredity. The same has been true of expression. Speech has ordinarily advanced no farther than

the opening of the stage in which the mother-tongue is imitated and used. Memory is not strong or persistent, and is confined chiefly to recognition in representation. Concept-building is confined practically to this last stage of presentative cognition, plus an association of the familiar experience with the name or symbol which stands for it. In short, all mental life whatsoever of the infant, prior to the kindergarten age, has been a close accompaniment and reflection of the physical life. Nutrition, primitive sensation and reaction, instinctive feeling and expression, sum up for us about all that can be said of the child mentally or morally. It is in these fundamental processes, and the unstable habits of which they have left traces, that the work of the kindergarten must be based. It would seem to be a tenet, sanctioned by common-sense and experience, that whatever is attempted at this age, as well as in any other, should both be founded upon faculties undoubtedly present in the child at the time, and be in direct response to the needs and instincts for development which the child displays.

The mental life of the child in the kindergarten is not to be sharply distinguished from what has immediately preceded. There is the same strong appetite of the senses and for instinctive and fundamental forms of action. But associated with these earlier faculties are certain special forms of instinct which must unquestionably furnish the points of attack in kindergarten work. They represent, in fact, some of the keener interests which awaken in senses and muscles as soon as the body and its members have been brought under ordinary control. Among these I should mention the instinctive love for, or interest in, nature. There can be no doubt that we have a good basis for the approach to nature in the keen sense-activity of the child in these years. The senses of the kindergarten child are in a period of very active and rapid development. But have we any evidence of an interest in nature which transcends mere sense-activity? I believe there is abundant evidence that we have here a genuine and instinctive feeling for certain features of nature. The effort to possess and play with moving life in nature is a veritable passion with children. Sudden relief of the unexercised appetite is accompanied with expressions of ecstasy. Deprive them of their newly discovered treasures of life, and they become frantic. Hardly less pronounced is the love for plant life, especially in its effects of color. Interest in inanimate objects, such as water, shells, stones, very generally becomes first manifest thru the instincts to collect and acquire. Fancifully formed and colored objects are collected and preserved. The collecting instinct leads directly to roaming and hunting. Instinctively the free child turns more and more to the great wealth of nature all about, if he can only reach it. In the future it shall be a part of the business of education to see that nothing prevents his reaching it.

Suffice it to say that these early born instincts of love of nature, even

of fear of some of its phenomena, of collecting and acquiring, of tramping and hunting, offer, on the side of mind-growth, the priceless opportunity of the kindergarten. It matters not at this age whether he appreciates its unity or not. How can he comprehend the unity of things before he has intimate experience with the things? It matters not at this age whether he becomes "conscious of the evolution in nature." Grand as that consciousness must one day become to him, there is no basis for it now. Any "appreciation of unity," or "consciousness of evolution in nature," that would rise to a dignity beyond the farcical, rests at least upon comparative breadth of experience and powers of reasoning. The latter nature wisely withholds from the child at this time; the former she now desires to give him. O, that the kindergartner might appreciate this opportunity for its full value and put faith in a large measure of nature-work! But probably as long as the doctrine is preached that Froebel's gifts develop in the kindergarten child an "appreciation of the unity" and a "consciousness of the evolution in nature," the weaker, less active, and less independent practitioners are going to fall back upon the gifts for the training of this side of the child's nature. "What should be done?" do you ask. I reply: Bring him more completely and extensively face to face with nature everywhere; forget order and unity and the "spiritualizing of realities" for a time, and teach him to *know* nature's individuals; teach him to *love* them, to observe their growth and functions from day to day and week to week, to appreciate their uses, to call them by their names (relying just here upon the active language development of this age); do not lug symbolism into nature, unless it be a perfectly plain and notable improvement upon nature; take excursions, no matter how brief necessity may make them, and let the child revel in his rambling, hunting, and collecting instincts. "But," you tell me, "some of us are so far away from nature that all this is impossible. Your kindergartners in California are peculiarly favored thruout the year; but what of us who belong to northern Minnesota or the heart of Chicago?" I reply: You cannot get away from nature; everywhere in the universe she has something to offer you. Ingenuity and the diversion of one-half your fund for materials into more legitimate channels will solve the problem.

We have seen, on the sense side, that mental activity of the kindergarten child rests directly upon the physical life. There is very little reflection natural to the child of this age, in the sense of any long inhibition of impressions just prior to action. At this age mental imagery and physical activity or physical expression are constantly co-ordinate; indeed, physical action may be called the child's natural mode of reflecting upon his experiences. According to this view, play, especially imitative and representative plays, speech, dramatization, graphic drawing, modeling in clay, building and constructing with blocks — activities all

based upon instinctive forms of reaction common and notable in this age — are to the child functionally modes of reflection.

I know but one apparent or partial exception to this trait of child life at this age, and that is his attitude in listening to stories. Yet even here there are many evidences, in speech, dramatization, and the like, of preference for physical reflection ; and there are abundant evidences that many children would like to run away from the long morning-circle hour before they do, to play, or draw, or act out something they have heard about. In cases where restraint does not seem essential, they have been known to stop a story for the sake of self-expression.

In all these acts of physical expression, reflection, construction, etc., the essential feature to the child is freedom, spontaneity. Spontaneity of activity has no meaning if it is not summed up in the free response to instinctive forms of reaction. Whatever else may be read into the conception is a mystic product of the imagination. Spontaneity is either something definite or nothing. It is in the field of free expression, then, be it in building, painting, graphic drawing, or imitative and representative play, that the kindergarten materials, gifts, and occupations find their greatest function. If they are not a key to nature, the gifts at least lend themselves readily to the constructive interest of the child. To this end they should be employed abundantly, together with many of the other kindergarten materials. There is not time to enter in detail into each one of these forms of expression. Suffice it to say that each stands close to the child's mental life and needs, and that no pains should be spared to stimulate in the kindergarten child, and to give opportunity for, free efforts at self-expression in speech, in dramatization with the whole body, in drawing and painting, and in constructing. Let us lay emphasis upon the expression "free efforts." By this I do not mean to exclude the principle of suggestibility. The teacher, I believe, should herself use the materials, express herself, be constantly suggestive, in all the modes which are sought of the children. But she should not indulge in the painfully exact, analytic dictation exercises, which the child can only mimic. The finest touches in the child's powers of expression come to him thru suggestion, unconscious imitation — as witness his speech, his gestures and mannerisms. Dictation, such as I have described above, stands as a direct violation of both instinct and spontaneity.

I suspect that the effort to anticipate certain technical requirements in art development is the cause of this abuse of dictation in the kindergarten, just as a similar, but equally premature, effort at technical speech development caused the misuse of grammar in the grades. But I believe that free expression is the best starting-point for artistic development. Conventional and geometric forms have little to do with beauty in art, except in architecture and decoration, and even here they are always servants of a large, beautiful thought rather than the elements of beauty.

But broad art appreciation rests upon abundant sense-activity, associated with memories of free movement, as well as upon powers of symbolism. These are just what nature proposes to give at this time. The effort to reflect his experiences in his own works, the many associations between visual and free motor sensations, are doing far more for him in this period than type forms can ever do, except in so far as they subserve his free constructive acts. The problem is, first and foremost, not one of mathematical, architectural, or decorative products, but of fundamental associations in the child between eye, ear, and the other senses, and the muscles of expression. Nor does this view of the problem exclude in the least the reflection in the child's powers of expression of the finer, more spiritual traits of his environment. These higher elements in their reflex upon character and personality at this age are never effective thru analysis, but always thru suggestion and unconscious imitation. Thru these processes the environment secures the reflection of its choicest forces in the child's action; and free, instinctive, or spontaneous action is at this age the child's method of growth into personality.

When we turn to the moral nature of the child, it would seem again that we must recognize the physical nature of the problem. When we have granted that every normal child *may in time develop* a certain moral consciousness and will-power, we have said about all that anyone knows of his *innate moral nature.* If we remain content, however, with this benignant assurance of an innate moral nature of some kind or other in the child, there will be little in the content of moral philosophy which we shall not expect to find in the child at any time. Again, therefore, we shall be inclined to overlook the genetic problem — the first, second, and last in development.

We are all probably agreed that it is right for the child, as early as may be, to begin to grow into the habits, customs, and moral and spiritual consciousness of present civilization. But let the highest ideals of moral action environ him as we will, we shall find his approach to them genetic, and reproducing the movement of the race. There seem to me to be three sources upon which ethical development in the kindergarten may proceed. They are (1) the authority of parent or teacher who represents the moral consciousness of modern life, names acts as right or wrong, thus furnishes the child with its fundamental ethical experiences, and enforces, when necessary, the obedience which looks to the establishment of habits; (2) the spirit of obedience and good-will in the child, feelings which have grown up thru its dependence upon superior power and wisdom; and (3) feelings (of somatic origin) which are the emotional accompaniment of the instinctive development of the child, such as fear, love, anger, sympathy, and the like. These sources imply certain features in all moral training at this age. The child needs, first, moral experiences. Acts which would ordinarily seem indifferent to the

child must be labeled as right, or permitted, and wrong, or forbidden. A profounder philosophy of ethics is beyond the child, except so far as the reasons for "ought" and "ought not" may be couched in the terms of concrete present experience. There is, to the child, no other source for this labeling than the authority of parent or teacher. Herein has lain one of the strongest possibilities of the kindergarten. Its superior social environment has been able to furnish children with concrete ethical experiences; its social activities have been a direct response to the need of the child for physical reflection. This is the age, also, when the lesson of pure and simple obedience must be well learned. One of the most wholesome things that can happen to a child of this age is to be brought up squarely against the inevitable *must* of an iron will. Nor should we overlook the fact that the instinctive emotions, such as love, fear, and anger, often furnish strong motives for action, good or bad; and that they make for the moral in development in proportion as they become associated with worthy and desirable ideas.

But what is, after all, the true moral plane, or even the best possible moral plane, of the kindergarten child? Is he an egoist or an altruist? Is he a utilitarian, a hedonist, or a eudemonist? Right here I fear I must be outrageously unorthodox. Fortunately for the child, he is a strict utilitarian, regards pleasure and happiness as the best criteria of good, and himself as the great end of existence. Granting without argument that altruism should be the ultimate aim of his moral development, I still think it would be a great misfortune to him if the kindergartner could in three years destroy his egoism, his selfish utilitarianism, or the predominance of his pleasure-pain motives. The pain of the disappointed self, the conflict of utility and duty, and of self with other selves, must furnish splendid experiences in ethics long after the kindergarten age. I doubt if any genuine altruistic act can be elicited from the child of four or five. The very act of throwing the arms about and loving the mother is tinged with hedonism. Sympathy is first provoked by sadness or injury of another, which becomes painful to the child. Charity in childhood is as hedonistic as love. He co-operates with society because he has learned that it pays to do so; and have we not, as a rule, taught him just that lesson? Primitive as these ethical principles may seem, they are just what should characterize the experiences of the child, and just what are presupposed in the development of a higher ethical consciousness in after-years. The kindergarten should enforce their lessons abundantly in the concrete The attempt at moral abstraction from literary sources, presented in story, overshoots both the experience and power of the child.

In conclusion, let me say that I can lay no claim to originality in the thought of this paper. I am well aware, too, that many of our advanced kindergartens have already begun to realize many, if not all, of the

suggestions herein presented. Yet I believe it is also true that the majority of kindergartners are still isolated, exclusive, and idolatrous in practice, and that there is still great need of efforts to keep fresh and free from formalism what has been one of the livest factors of our modern educational work.

MUSIC IN THE KINDERGARTEN

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A letter of inquiry received within the past month from a mother whose daughter "has a knack for getting along with children and must earn her living," reads in part: "I have never seen a kindergarten, but I hear that everything is played there, and I want to know if the music is too hard for her. She has taken lessons one year, and can play the 'Mocking-Bird March' and such pieces."

Even into a thinly settled district of a northern state has gone the word that music is in the kindergarten, that kindergarten is music, "everything is played there." But how?

Were music and kindergarten interchangeable terms, and did we all know how, then would circle-play and table-work be set to a beautiful rhythm, the melody would never be over-stimulating, nor the verse gushingly sentimental. Every instrument, selected by the composer for the kindergarten orchestra, would be attuned scientifically, and the harmony would give forth the resolute fifth as well as the sweet mediant; any abrupt modulations would melt into melodic cadences and end on the strength-giving tonic. Then over the doorway would rightly be inscribed the hall mark of the composer, "Unity."

Our ideals float in the heavens; our practice walks the earth. It needs be so, but there must always be the light from above to illumine practice's path, and the eye must not forget the upward sweep nor the hand the onward reach.

What, then, of the ideals and practice of that music that is not the whole kindergarten, but an all-essential of the whole?

We need not remind anyone of the irresistible appeal and magical charm of that wonderful thing called music. It is the royal art language that speaks straight to the heart of man. School people cannot deny nor belittle its value as an educational means for fostering and invigorating the child's soul-life.

To Froebel the term "music" covered all of nature's measured sounds and movements, as well as man's best products in the tone art. To

one of his poetic habit of mind, strongly influenced by the appeals of natural beauty, the "voices of nature" gave forth music of a very real and lovely kind. With this widening of the term the artistic devotee unhesitatingly takes issue. "There is no music in nature, neither melody nor harmony," says he. "Music is the creation of the human intellect. Nature has given only the rough element sound, and man has seized it and with infinite pains subjugated and tamed it." His reward is the most spiritual of all the arts; the one with a record of the longest infancy, and with the splendor of a full maturity still before it.

While we admit the strength of the musician's argument, most of us prefer, in our ordinary language, to give the term its poetic significance. We care not to shut the door of music on the twitter and thrill of bird notes.

All sounds stir, in varying degrees, the feelings of man. "Music," to quote Dr. G. Stanley Hall, "cadences the soul." It is therefore natural that Froebel, firmly believing in the primacy of the feelings, that "emotion is the breath and life-blood of thought," should emphasize the importance of music in the education of the child's sensibilities and as an agent in his moral life. He considered it so fundamental that he placed it in the kindergarten to give to budding thought and action, as someone has said, "a halo of meaning." Music is as much a need of the kindergarten as pure air and bright sunshine. It gives the spiritual atmosphere for the day's work and play. No educational revolution will take music out of the kindergarten.

The kind of music best suited to the early stage of childhood is still, however, an open question.

While the ideal kindergartner should have fine musical knowledge and skill, few comparatively have received such special training in the art, plus a grounding in the different "ologies," that qualify them to express unequivocally their opinion as to that music which satisfies the child's racial instincts and also "stimulates the growth of worthy aspirations."

We are in need of a "committee of ten" to define exactly the requirements of good kindergarten music, and to furnish a list of "Twenty-five Best Songs for the Kindergarten Child." The list could be shorter, for children never weary of their favorites — tho the teacher may become very much bored. In a primary class the children were specially fond of "Happy Little Fishes." They asked for it at every singing period. It became so tiresomely dull to the teacher that she finally ruled that it could be sung only on Fridays. The free, darting fishes of the song were to have their one association with those of the fish-stand and the dinner-table. Said a mother to a kindergartner: "When I recall my kindergarten work in the light of my experience with my own little daughter, I wonder how I could have given so many songs. Unconsciously I was pleasing myself and not the children."

That the kindergarten songs in melody and verse have improved is testified by the better collection published in late years.

"We rob the child," says Froebel, "by discontinuing so soon the development of rhythmic movement in early education." In marches, movement, and imitative plays, accompanied by well-accented music, and in rhymes and jingles, the kindergarten furnishes an educative outlet for the child's instinctive tendency to rhythmic utterance.

The themes of the kindergarten songs and games are those that fall within the circle of the little child's interests, help to pattern his mental fabric, and awaken feelings which will crystallize, as life advances, into noble ideals. They are child stories with the added charm of rhythm, rhyme, and melody. To know of what Froebel would have them treat specially, a study of his *Mother Play* is necessary.

That the songs introduce occasionally words that tell nothing to the child until he coins them into his vocabulary, we cannot deny. "English as She is Interpreted in the Kindergarten" would make entertaining reading if kindergartners cared to collect the many odd and humorous analogies that the child makes in his attempts to sing the texts. In our patriotic songs some children sang for the line, "The world offers homage to thee," "The girl offers cabbage to thee;" "Pilgrim's pride" was given, "Pillman cried," and "Freedom's cause" has found its interpretation in "Three dumb squaws." "Ring receiver," in a "Finger Song," was sung by all children, "Ring, Miss Eva," since "Miss Eva," when explaining the new word, pointed to her own ring. In a song about Washington, "Right, he knows, will win the day," was clearly enunciated, "Wipe his nose on every day."

Quite often we find children ignoring the words as given by the kindergartner, and singing syllables as entrancing and curious as those of "The Jabberwock." They ripple over the lips in such quick succession that the little bubbles of sound vanish before the listener can catch and hold them to discover what they are. Then there are those inquiring children who, judging a new word has a concrete counterpart, will ask, after singing, for instance, in "The Merry Brown Thrush," "If you will not bring any sorrow to me": "What does sorrow look like? Don't the bird like to eat it?"

Those who succeed in obtaining joyful singing, with pure, soft tone and clear enunciation, gain it at the price of untiring watchfulness, in which the children have no share. They neither slide over inaccuracies of speech, nor do they make the teaching of words degenerate into such a tiresome drill that the life of the song has fled before it is known.

They forestall mistakes by removing, as far as possible, the occasion for them. They enlist the children's interest and sympathy at the outset in the story that the song tells and the singing in a melodic outflow of its sentiment. They are careful to select melodies that bear the musicians'

stamp and are tuneful without the support of the piano. They know that, if there are many verses, or too long verses without a simple word repetition, errors in speech will be apt to arise. Such songs are not in their collection, or, if they are, some verses are omitted. They are careful not to give too many songs. They wish the children to carry the memory of some into the life beyond the kindergarten.

As ear-consciousness is a necessary basis for correct tone production, they give many opportunities for the child to become "ear-minded." His attention is held without the asking at "the resting times" by short snatches of good instrumental music and by the playing of airs that will be given later when this unconscious absorption will help toward the easy learning.

Having the word of the psychologist "that no normal child lacks the capacity for musical appreciation, and that it is in early years that this power can be easily cultivated or destroyed," they not only have the children hear pure tones, but practice them. As this practice depends upon imitation, and as the most common and familiar musical instrument happens to be the human voice, they know that the quality of the speaking and singing voice is of great concern.

To give ear-cultivation and to keep the soul susceptible, thru one of its avenues, to the beauties of nature, Froebel would have us direct the child's attention to the natural music of the world. In our cities this is impossible without frequent visits to parks. The excursion, for this and other reasons, is coming to be a necessity.

Bred in the city's din, how many of us have the ear-discrimination, not of the Indian, but of a Thoreau?

A charity kindergartner, whose rooms faced a street of noisy traffic, made it a practice, not to add noise to noise, but to draw the shades and have a "listening time." It was quite remarkable how well the little ones could guess what kind of vehicles were passing and their directions. They had to tell about it in soft whispers. Street sounds are inappropriate media for this sense-training, but the most was made of unfavorable conditions. It was always a delight to hear the soft, sweet singing of those good little listeners.

That children are too often permitted to scream shrilly, rather than to sing high notes softly, we all know. Even when melody and verse are good, the song is often ruined by the mistaken idea of the teachers that, if children are to enjoy their singing, and if singing is to sound well, there must be volume upon volume of sound.

A school superintendent attended the last rehearsal of an entertainment to give it the seal of his approval. When the singing ended, he said: "You can do better, children. Sing with more vim. Open your mouths and sing out." All the "singing from within" that had been gained in rehearsing was lost in the time it took to sing one verse. Music became noise.

When coarse sentiment is added to noise, can there be anything more debasing in musical training? One instance illustrates this. A primary teacher, thinking to please a visitor whom she knew by reputation to be a friend of the kindergarten, prefaced the song that the class was about to sing by the remark that it was "a kindergarten song and a special favorite." The tune was "Yankee Doodle," the theme "The Father of Our Country;" the chorus ran:

Georgie, Georgie, Ha! Ha! Ha!
You were a little chopper.
Georgie, Georgie, Ha! Ha! Ha!
But could not tell a whopper.

(Prolonged accent, of course, on the closing syllables of the rhymed lines.)

In coarse doggerel "Georgie" was taken thru the seven stages of man with always the same refrain. The children sang with increased gusto; faces grew rosier, mouths opened wider, necks became more crane-shaped as the verses multiplied. They enjoyed it noisily. Before the echoes ceased roaring, the teacher beamed radiantly on the stranger and nodded approval to the children. With heads in the most approved Delsartean relaxation, they gave back a smile of such childish satisfaction that the visitor inhibited signs of disapproval and returned a half-fledged smile.

Shades of St. Cecilia and the immortal Washington! What a discourager of reverence! What a contrast to that charming song in Mr. Tomlin's collection:

We'll thank Columbus and the rest,
But love our Washington the best.

While we may learn from a study of street songs and games their fascinating features for children in gutter-stained garments, they cannot, without a cleansing process, be received into the kindergarten.

While our songs should amuse, can they not also inspire and ennoble?

The late Senator Hearst's first visit to a kindergarten was on the occasion of a Thanksgiving luncheon generously donated by his wife to over a hundred children. Among the novel sights to him was the absence of the high-chair. "You do not, I see," said he, "suit the child to the table, but the table to the child." That expresses the fixed attitude of the kindergarten. The child always — the child as he is, in the light of what he should become.

Wherever we find rhythm, rhyme, and melody suited to the *child's* needs and sung joyously, without strain to the voice, there can we say:

"Yea, 'twas tuneful music and much merit in it,
Expressively rendered and for the children fit."

NAUGHTY CHILDREN

BY ELMER ELLSWORTH BROWN, PROFESSOR OF SCIENCE AND ART OF TEACHING, UNIVERSITY OF CALIFORNIA

Whether a child is really naughty or not, in any given instance, depends on the point of view. The most of us can remember times when we were ourselves called naughty by censorious elders, altho to ourselves we were nothing of the sort. If our command of language had been equal to the tumult of our feelings, we should have said that we were deeply injured; we were engaged in the endless battle for human rights, and our elders were arrayed against us. For myself—I will not presume here to speak for others—I can remember other instances in which I was fully conscious of my own naughtiness. I wanted to be naughty, and doubtless I succeeded admirably.

Let us see what it means that the child sometimes thinks he is injured when those who are better informed call him naughty. Our goodness and badness arise out of our relations with other persons. The type of all badness is selfishness. Badness is essentially the exalting of the lesser above the greater; the preferring of the immediate interests of the one or the few to the permanent good of all. So our goodness is not merely an abstract purpose or intention of doing right; it is conditioned by our knowledge, and by our ability to personalize our knowledge—to bring it home to our real human life. The naughty person contents himself with the narrow view of what he himself or his immediate circle wants, and wants now. The person who is less naughty takes into account what is good for a larger circle of persons; and not only what is (apparently) good for them now, but what will be good for them in the future as well. Now, the view of little children is not only narrow, but fragmentary and perpetually shifting. One of them will be found now self-centered to the last degree, ready to sacrifice everything in the world, whether belonging to himself or to others, in order to gain possession of a mess of sticky candy; again the same child will seem to take a view perfectly chimerical in its breadth and elevation. There are times when a child sees so clearly the immediate object of his desire, and is so blind to everything else, that whatever hinders him from its enjoyment seems to him the height of tyranny. The sense of injustice rankles like poison in the minds of many children. I can remember hardly anything else that stirred me so deeply in my own childhood. The problem of the teacher at this point is the problem of leading the child out into the larger view. And the chief difficulty which presents itself is the difficulty of coming down to a sympathetic recognition of his present limitations, without cheating him of his right to training for higher things.

The place of the school among the institutions of society may give us a suggestion here. The school stands, in a sense, midway between the home and the state. The child, to be sure, is at the same time a member of the school, the state, and the family. But the day that he first goes to school is a turning-point in his life. It is the day that he takes his first great step from a life in which his home is all in all toward a larger life in which the complex of relations which we call the state will become real and significant for him. His home has been for him the ordered universe, surrounded by a chaos of things that have no father and mother. He has had some glimpse of other families, to be sure, and has very likely learned to fear the policeman. But for the most part the outer world is an unexplored wilderness. It has not yet dawned upon him that the family, which is his world, is constituted and protected as a member in a larger society. The school, and particularly the kindergarten and the primary school, is for him an intermediate stage by which he may be led gently and surely to a consciousness of his wider relationships. It shows him a society in which there is a head who is not father or mother; in which there are other pursuits and other rewards and punishments than those of the home; in which his duties, aims, associations, and enjoyments are different. It is a great mistake to suppose that any school should be "just like a home." It discharges its function only in being unlike a home. To bring the child into new relations and take him out of his absorption in the interests of a very small circle, is a part of the real business of the school.

This statement should, of course, not be taken to imply that the school must break suddenly and sharply with the home. Such a change would be disastrous to the peace of mind of some children and to the manners and minor morals of others. But the school certainly should enlarge the range of the child's interests and duties.

Such a change involves a great deal of readjustment. The new interests are not to be substituted for the old, but added to the old. The old interests are to be newly interpreted in the larger experience of the child. Things that were pleasing and satisfying in the home before will now take a lower place in the child's estimation; and *vice versa*. With all these changes, he will find that things which were not regarded as naughty before are now very naughty indeed. Altogether, the transition involves much that is painful to the child and to his family friends, along with much that is delightful; but it is the delight and the pain of enlarged experience.

The difficulty of this transition brings into sharp relief all of the defects of early training in the home. Sound moral training shows itself, too, in various ways. One of the evidences of such soundness appears in a kind of moral plasticity. It is possible for a child of five or six to have become somewhat hardened in wrong courses of conduct. Such hardening

appears when some one narrow set of interests, usually in the nature of self-indulgence, gets the mastery, unchecked by other strong interests, or by the growing sense of obligation. Most children come up to school age without any such single overmastering interest. They like good things to eat, like to see new and strange sights, like to hear wonderful stories, like to use their limbs in all sorts of free play, like to make things (or still more, perhaps, to un-make things), like to play with other children, like to be praised, and like a great many other things. But each of these likings is kept from being inordinate by other, counter-balancing likings which are growing up with it. I think those who observe children closely are often struck, for a single example, with the fact that the liking for sweets and other toothsome things, while it may be present clearly enough, does not in normal children run riot and dominate over other interests. This checking of single interests, so that no one enjoys a full mastery, is what I mean by the moral plasticity of a school child. Whatever partial hardening of tendency the child may have brought to school with him speedily appears in some form of naughtiness. It may be the sense of private ownership has become unduly strong in one. If he is the only child in a well-to-do family, his unwillingness to share with others may not have been noticed before. But in the school he is surrounded by many others, and good comradeship and peace are possible only if the spirit of free co-operation is abroad. The child whose care for the things he calls his own is carried to an extreme soon comes into collision with other children, and the teacher has a case of naughtiness to attend to which the child does not at first understand to be naughtiness at all.

One great service, then, which the school must do the child is to give him a larger and clearer view of what is right and what is wrong.

I would not be understood as saying that this is all. There is another sort of hardening which is sometimes to be observed even in children of four or five—a kind of set determination to follow their own choice, even tho they already know, more or less vaguely, that it is wrong. I suspect that, even in the most extreme cases of this sort, a clearer understanding of the difference between goodness and badness is one large element in the correction of the wrong. But it is not all. The disposition to do what is recognized as right must be strengthened, the habit of right action established. "Childhood is the time for rules and for mechanical drill in the habit of obedience," as Professor Coe remarked in his paper on "The Morbid Conscience of Adolescents." Should obedience be required in the kindergarten? Yes, if the kindergarten is a human institution. In all of the other institutional relations into which they enter in life the children will find laws which they are to obey, and compulsion in some sort or other to insure obedience. If the kindergarten does not have this wholesome and necessary element, it does not prepare

for the real world of institutions into which these same children are to grow.

We speak, properly enough, of children's rights. One of the most sacred of these is the right to be taught the lesson of obedience.

But let us return to the consideration of such naughtiness as results in large measure from ignorance of new relations which have arisen in the life of the child. Every little while some new experience brings home the conviction that the lack of knowledge has a large place in the badness of little children. A striking illustration appears in the story of a child taken from a home for infants, as told by Mary Florence Munro in the *Educational Review* for last November:

> She has a vivid imagination [says the narrator] which, joined to weak perceptions and a strong love of approbation, made her a true-born liar, if ever a child could be called one. . . . . She was such a loving little soul, she wanted to do so exactly right, and was always so penitent, that it seemed hard to find the secret of the trouble, until, one day, when an unusually grave lecture had been read to her on her besetting sin, she quavered out: "But what is truf?" . . . . The lectures were cut short, and it was taken as an accepted fact in the family that it was hard for their baby to tell the truth, that everyone was trying to help her, and that little Mary was trying to learn to see things and then tell them exactly as they were. . . . . Often at first, when there was some doubt as to the truth of some statement, the listener would placidly inquire: "Did you think that time, little girl?" When she would reply, "I don't fink I finked it quite right that time, but it was like vis;" when the correction would be received with: "I am so glad you told it straight this time; keep on trying, and some day you can tell it right every time." At eight years of age she was a truthful child.

I find something very touching in the picture of that little one asking in all seriousness the question which Pilate asked with flippant cynicism long ago. It surely suggests the need of patient and sympathetic instruction in the meaning of morals — a need not unknown to children of a larger growth.

The saying, "All things whatsoever ye would that men should do to you, do ye even so unto them," has a depth of wisdom which is hard to fathom. It lays decisive emphasis upon that sympathetic entering into another's point of view which is the root of much that is finest in our courtesy and our morality. It is the spirit of this saying which has so wrought upon the people of modern Christendom that the most impartial historians see a great change coming to light within the past two or three centuries, men becoming less cruel, more sensitive to the sufferings of others. Some children develop a morbid sensitiveness to others' woes at an early age. But for the greater number there is much need of patient teaching at this point. They need to put the discomfort and injury which they cause alongside of that which they themselves have suffered, in order that they may realize that their own conduct is wrong. It takes skillful teaching to do this without overdoing it. And one chief element of such teaching is timeliness. The right word at the right moment will give to many a child a new and enlarged view, and so help him really to

begin taking account of others' good as well as of what he believes to be his own.

It is always in place to caution teachers against assuming that a given appearance is naughtiness without stopping to see what has caused it; and this may be taken as the moral of my paper. Those who work in charity kindergartens in the poorer parts of our cities well know what strange conditions may be found at the bottom of even a five-year-old's seeming perversity. Lack of food, lack of sleep, whisky, vicious surroundings at home as well as on the streets, the lack of common cleanliness, and a hundred other things, are all too common discoveries which reward their inquiry. When children come from homes of the well-to-do, different causes are found to be at work, causes sometimes quite as productive of naughtiness as those noted above. A particularly difficult condition to deal with is that in which the parent comes to the teacher to ask for special indulgence for a child who is already suffering from over-indulgence at home. In fact, the school has much to do in correcting — unobtrusively, let us hope — the mistakes of home training.

We should add, in all humility, that there are homes in which much is done to correct the errors of school training. The teacher needs not only to look to the genesis of naughtiness in any given instance, but also to guard against calling that naughtiness which is not really wrong. The reading of history should make us thoughtful on this point. We know that men have been punished again and again, by legal process, for acts which we see now to have been evidence, not of criminal intent, but of the most exalted virtue. If the little histories of the schools could be fully written, they would show sad instances of children's being made to suffer, not for the wrong, but for the good that was in them. The school and the state must enforce wholesome order with firmness and decision; but many mistakes may be prevented in both the school and the state by the exercise of great care to distinguish goodness in the making from fully accomplished wickedness.

A clear appreciation of the fitful and spasmodic elements which appear in the process of human development is of use at this point. It is safe to assume that no child is distinctly and finally naughty. He may be guilty of naughtiness, but you cannot read his character from single acts. There was nothing that I rebelled against more strongly in my childhood than the summing up of my character in this way. I neglected something that I ought to have done, and was told that I was the most heedless boy that my accuser had ever seen. I admitted the neglect in the given instance, but swelled with indignation at being called a heedless boy. I remember trying to voice my protest, but was unable to frame it in words. I did not know just what my objection was, but I felt it all thru me in a tumult of passion and rage. As I look back on it now, it seems that I was trying to say: "You must not generalize me into a bad

boy because I have done this one bad act." And I believe now that the boy was right. Children do many naughty deeds which have only an imperfect, embryonic connection with the rest of their embryonic natures. Do not classify them in the light of such isolated deeds. The time has not come to separate the sheep from the goats, and you are not charged with making such division. Above all, in what you say to a child, and in what you say to others about him, distinguish sharply between condemning his naughty acts and calling him a naughty child.

These few suggestions fall far short of going to the root of the matter; but that, certainly, is not expected of me today. I merely offer a few notes, on a question of deep significance. One thing more I should like to say before closing. I have had occasion elsewhere to hint that the man should not utterly outgrow the things of his childhood; that the child should have to do with some things of lasting significance, in order that there may not be that break of continuity between childhood and manhood which makes it so easy for some to leave behind their childhood's nobility as well as their childhood's puerility. With this in mind, it appears especially important that the standards of goodness and badness set before children shall not be petty, external, and artificial, but that they shall point unmistakably to the standards of the highest living. If a child is taught to believe that naughtiness consists in the transgression of minute and arbitrary rules, he must either break violently with his past in the process of growing up, or grow up into a narrow and artificial manhood; and either of these results is by all possible means to be avoided.

The teacher, then, must have real human sympathy with little children, on their way from babyhood to manhood, if he is to deal justly with their naughtiness. We have, all of us, much to learn in the domain of morals. Our own ignorance and moral immaturity should teach us to be very patient with these little ones. There are some lines of Coventry Patmore's which often come to me to reinforce this lesson:

My little son, who looks from thoughtful eyes,
And moves and speaks in serious, grown-up wise,
Having my law the seventh time disobeyed,
I struck him and dismissed,
With harsh words and unkissed;
His mother, who was patient, being dead.

Then, fearing lest his grief should hinder sleep,
I visited his bed,
And found his lashes yet,
With his late sobbing wet.
Then I with moan,
Kissing away his tears, left others of my own.
For on a table drawn
Beside his bed he had placed within his reach
A box of counters, and a red-veined stone,

A piece of glass abraded by the beach,
And six or seven shells,
A bottle of bluebells,
And four French coins, ranged there with careful art,
To comfort his sad heart.
So when that night I prayed
To God, I wept and said:
"Ah, when we lie at last with tranced breath,
Not vexing Thee in death,
And Thou rememberest
The toys
That made our joys,
Then, fatherly not less than I,
Who am molded out of clay,
Thou'lt leave Thy wrath and say:
'I will be sorry for their childishness.'"

THE KINDERGARTEN CHILD PHYSICALLY

BY FREDERIC L. BURK, SUPERINTENDENT OF SCHOOLS, SANTA BARBARA, CAL.

The child at six years of age, the end of the kindergarten period, has reached almost two-thirds of his adult height and from one-fourth to one-third of his adult weight. This does not mean, by any means, that the kindergarten child stands in the same numerical relation to the developed adult, for height and weight are gross standards and give us no accurate information upon essential problems in the details of growth. The body is made up of parts and organs, each in a certain measure independent of other parts, each with its separate nascent or growing periods and resting periods. Consequently height and weight give us merely the composite or algebraic sum of growth of these various parts. One part may be growing while its neighbor is resting, or certain parts may not have entered upon that period when the important increments of growth are added. For example, the neck does not make any growth of consequence until after the seventh or eighth year, while the length of the face is practically completed by this age. The increase in lung dimensions is merely nominal until pubescence, when, in the course of a short growing period of two years or less, the diameter of the chest is nearly doubled. The heart and the regulation of the blood supply undergo material modifications years after the kindergarten period is passed. The brain reaches its maximum weight, practically, as early as eight or nine years of age, and over 85 per cent. of this growth is obtained previous to four years; the addition in brain weight during the first four years is about nine times as much as during the second four years. The fact that the

kindergarten takes the child just at the completion of its period of most rapid growth in brain weight, and keeps him until the maximum is almost attained, is a significant one.

These are merely illustrations of the fact that the conditions of child life cannot be measured in terms of adult standards. If growth were regular and proportional in each part for each year, we might state the child in adult terms, but all of our factors are variable. Yet our curricula of studies, both in school and kindergarten, set up these adult standards by which to measure the child's progressive development, as tho growth were something to be measured by regular periods of time. On the contrary, growth is by fits and starts, as it were, with periods of very rapid rate followed by resting periods.

To cite another important illustration of the uselessness of judging the child by adult standards, the matter of sex is striking. The adult is sexed, and, physiologically or psychologically, no treatment of the adult can be exact unless we specify the sex; but the child, until the age of ten or eleven, is practically without sex. The difference in the size of the sexes, in their rates of growth, their instincts, impulses, interests, physical and mental traits, etc., is so slight and immaterial as to justify no separate consideration of them either in theory or practice. Yet, after the age of ten or eleven years, the sex changes are so enormous, both physically and mentally, that the sexes can no longer be classed together in any description; and our system of giving them both the same course of instruction is rendered extremely questionable.

There is another important distinction between the child and the adult, or even adolescent. The adult has, to some extent at least, possibilities of original deviation from the habits of ancestry; the child is the slave of ancestry. His movements, his plays, his games, his instincts, his fears, his methods of thought and action, all bear the indelible stamp of hereditary control, and are all fairly well in the middle of the well-traveled road of race evolution. As the creek, confined to the deep-worn gorges in the mountains where it originates, nevertheless, upon issuing forth finally upon the plains, finds it easy to change its channel bed, so the human being, in its earlier stages of development, is more determined by hereditary influences, until in adolescence it comes to the open plain where originality is more possible. In the growth of the nervous system we find this law well demonstrated. The structures which mature first are those which are oldest in race evolution. Those which are most recent, and consequently are more pliable and subject to modification, mature later. The time at which a structure controlling a given movement matures is determined by conditions which are internal, and, in the case of the activities which appear in childhood, are less subject to modification by external environment than in the case of those which mature in adolescence. The forms of movements and exercises which are

oldest racially are also determined by internal law, and are little susceptible to modification.

Education of the adolescent may include the idea, to some extent, of teaching the individual something new to the race. Education of the kindergarten child can signify nothing more than at the proper time and in the form heredity has determined to reawaken into activity the structures of racial antiquity. The kindergarten child is still in the deep-worn gorges which his ancestors for ages have trod. Originality is a virtue in adolescent education. In the kindergarten originality in the form of exercise, in the time of its application, which many of our systems of physical culture have attempted arbitrarily to introduce for reasons of æsthetic grace or theories of some systematic or orderly development, cannot be too severely condemned. With kindergarten children these are matters to be determined by internal laws of the nervous system. This hereditary order obeys no logical or æsthetic system. On the contrary, the order by which movements develop in childhood appears to the adult mind with a love of orderly system to be mere vagrant caprice. For example, the thumb movements, from a logical standpoint the most fundamental and elementary of the hand, develop several months later than those of the hand as a whole, because the ancestors of man did not use the thumb, and its movements are among the latest in a racial sense. The baby's two eyes tend at birth to move independently of each other, and only acquire perfect co-ordination in the course of some months, while the baby's two hands begin with such strong tendencies toward co-ordination that he must duplicate the movement of one by the other; in hand development the child grows from co-ordination toward independence, while the principle is reversed in the matter of eye movements. This paradoxical condition doubtless finds its explanation in the fact that in animal ancestry the movements of the fore limbs ever have been co-ordinated, while the eyes, as a rule, have been more or less independent of each other. In human life the conditions have been reversed, and the individual repeats this history in his earlier stages.

This dependence of the order, form, and time in the development of movements upon the past habits in racial evolution is manifest everywhere in children's instinctive activities, and peremptorily forbids our artificial attempts to systematize movements upon any superficial theory of grace or logical order, or to introduce original departures from racial habit.

From this standpoint we come upon the principle of first importance, that the fundamental movements, i. e., those oldest in the race, and comprising largely those which are performed by the larger and more centrally located muscles, normally become functional before the accessory movements — those which came late into the race. Among the latter are those of accuracy, rapidity, and long and complex sequences of finger movements used in writing, sewing, weaving, etc. Spontaneously, children

of the kindergarten use only the fundamental movements, as the studies of Gulick, Miss Sisson, and others have shown, and as our careful daily observations of children's plays in the Santa Barbara kindergartens have corroborated. In so far as accuracy and rapidity of finger movements are concerned, the studies of Bryan and Gilbert show clearly that the nascent periods for these do not appear until after six or seven years. The child of six years, normally, has scarcely half the power for rapid finger movement that an adolescent of sixteen possesses, and accuracy of finger movements, such as writing requires, Dr. Bryan shows, reaches its nascent growth between six and eight. These considerations demand from the kindergarten the abolishment of all movements which are not fundamental and which seek to introduce delicate finger movements of any kind. Blackboard work instead of pencil and paper, and the abolition of drawing or other similar work which requires accurate line work, are essential.

But it by no means follows that, because we cannot arrange for the kindergarten child some system of orderly and systematic exercises, physical culture has no place in the kindergarten curriculum. The child's natural play certainly comes under pedagogic cognizance, not as a necessary nuisance to be put up with, but as an important instrument of education. But I think modern study bids us reverse some current notions we have entertained of play. Many have chosen some idea to present and then have constructed artificial plays arbitrarily to illustrate the idea. The modern view would, on the contrary, bid us take the child's instinctive play without alteration and let it lead and direct us. Darwin, Spencer, and the earlier biologists gave play a place of some theoretic importance when they ascribed to it the rudimentary place of representing the reawakening of the left-over activities of our primitive ancestors. But Karl Groos, in his recent monograms, while admitting that children's plays are rudimentary in origin, shows, nevertheless, that they have a preparatory function in stimulating the growth of those higher activities, mental as well as physical, which have proceeded in race history from the activities now represented by children's play. The large majority of young children's plays are those which the race once used in the practical business affairs of war and chase — those of pursuing, jumping, hiding, throwing, wrestling, etc. As in the race, so in the individual, they lead to higher activities and are essential links in the chain of education.

But in our selection and arrangement of plays for the kindergarten in the past we have been not altogether happy. The majority of the kindergarten games are socialistic in form, while modern study shows that the plays of children from four to six years are predominantly individualistic and the social tendency is minor. The social factor enters the child's life later than the kindergarten period. The play of children of

three to five tends to be fragmentary physical exercises without plot or system — mere running, jumping, climbing, etc. However, the dramatic and imitative instinct early ripens, and the child tends to combine these fragments into crude plays representing actions he witnesses, and so we find that he loves to play riding horse, playing bear, wild Indians, policeman, etc. This representative tendency is the controlling interest from four to six, but the child imitates that which he literally sees, hears, or feels, and his natural play offers no basis for the abstractly symbolic game of the kindergarten. He sees no meaning in his game. He is an actor, not a philosopher. There is no legitimate place for the æsthetic, ethical, or utilitarian attachment we so frequently find hung upon the child's play. The child plays in obedience to physical impulses of his nervous system planted there by the habits of ancient ancestry which lived long before civilized morals, ethics, and modern utilities came upon the field of action. There are a time and place for them, but it is an artificial graft which attempts to attach these to the young child's play instincts.

While the kindergarten cannot invent plays for children, it nevertheless has an important function in guarding the child's right to play, and in providing the time and racial incentives — clean sand to roll and build in, big blocks to build with, space to run in, bushes to hide in, poles to climb, hammers, garden tools, swings, balls, horse reins, etc. The scanty twenty minutes usually allowed for the recess should be at least multiplied by two. The usual excuse offered, that the kindergarten games and calisthenic exercises take the place of natural, free play, is quite untenable. They are artificial exhibition exercises, and have, as shown, little in common with the hereditary forms of play of children of kindergarten age. Internal demands of the growing nervous and muscular systems require their racial forms of exercise, and natural instinct is the only guide we have for these exercises. Even in children of school age the experiments upon fatigue by Kraepelin, Kemsies, Wagner, and others, have shown that systematic gymnastics are more fatiguing mentally than regular school work and cannot be interpolated in school work as recuperative means.

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES

FIRST SESSION. — THURSDAY, JULY 13, 1899

The meeting was called to order in Simpson Tabernacle by A. W. Plummer, of the Local Committee.

Dr. John W. Hall, of the State Normal School, Greeley, Colo., read a paper on "The Claims of the Individual Pupil in Class Work."

Miss Louise Hannum, Ph.D., Greeley, Colo., read a paper on "The Culture-Epoch Theory in Education."

The discussion was omitted until after the second paper was read.

President William N. Hailmann opened the discussion, and was followed by Dr. J. H. Hoose, of California; W. A. Bell, of Indiana; A. H. Collins, of Pasadena, Cal.; Dr. J. W. Hall, Miss Hannum, and others.

A committee on nominations was appointed, consisting of:

W. A. Bell, Indianapolis, Ind. A. H. Collins, Pasadena, Cal.
Esther Conway, Winchester, Ind.

SECOND SESSION. — FRIDAY, JULY 14

The meeting was opened by President William N. Hailmann, who delivered his address on "The Place and Development of Purpose in Education."

Superintendent J. W. Dinsmore, of Beatrice, Neb., read a paper on "The Vices of Childhood and Youth."

An animated discussion followed. Among those taking part were Miss Frink, of California; Professor J. W. Crabtree, of Nebraska; Professor J. W. Carr, of Indiana; Mrs. Blanchard, of California; Harry S. Budd, Superintendent Dinsmore, and the president.

Superintendent J. W. Carr, of Anderson, Ind., introduced the following resolution, which was unanimously adopted:

WHEREAS, As a rule, the same persons are interested in the discussions of the Kindergarten Department, Elementary Department, and Child Study Department;

Resolved, That the president of the Elementary Department be requested to invite the co-operation of the presidents of the Kindergarten and Child Study Departments in arranging for one joint session at the meeting for 1900.

The Committee on Nominations submitted the following report, which was adopted:

For *President* — Miss N. Cropsey, Indianapolis, Ind.
For *Vice-President* — Superintendent J. W. Dinsmore, Beatrice, Neb.
For *Secretary* — Miss Bettie A. Dutton, Cleveland, O.

The department then adjourned.

ESTHER CONWAY
Secretary

PAPERS AND DISCUSSIONS

THE CULTURE-EPOCH THEORY IN EDUCATION

BY LOUISE MORRIS HANNUM, STATE NORMAL SCHOOL, GREELEY, COLO.

The doctrine of recapitulation might recommend itself to the educator thru several considerations of various degrees of importance: by satisfactory evidences, by weight of authority, by a record of practical utility in school matters, or by signs of marked promise for the future. But a detailed examination of these claims would of course require a volume and much special knowledge. The object of the present paper is merely to look at the doctrine in a general way, with intent to discover what attitude toward it on the part of the practical teacher is likely to be most fruitful of good and least productive of harm.

The first question will naturally be: Can we accept the doctrine as a fact? In seeking light on this preliminary inquiry, we must at once distinguish the theory from the notion of an undefined general correspondence between the course of the race and that of the individual. The latter view, taken in the loose, vague way, appears almost axiomatic. The race and the child begin with a comparatively simple and go on to a comparatively complex life. What the race has attained is, in a general way, the end set before the individual, and, in passing from analogous starting-points to analogous goals, it would seem to follow, from the existence of one world and one general kind of process called mind, that the race and the individual must gather up and organize experience in somewhat the same fashion — must get from the starting-point to the goal by somewhat the same path. In this form the idea of recapitulation is more congenial to the poet and the mystic than to the teacher; it has abundant uses in speculation and imaginative expression, but no definite relation to methods and school curricula. The more precise — or, rather, the least nebulous — conception of the doctrine assumes that the development both of the race and of the individual can be described as a progress thru certain stages; and that, with some relatively calculable variations, these stages correspond in the two series. The inference is then drawn that, since the history of the child is writ large in that of the race, we can see more clearly in the race than in the child what is the true order of development. To this is often added the idea that, since the race has preserved the products of its activity in the most important stages, we have ready to hand the true food on which the child must be nourished as he goes thru the several

zones of progress from infancy to manhood. It seems needless to say that the admission of the undefined general correspondence just mentioned, in which all are doubtless agreed, does not imply acceptance of the more precise doctrine of recapitulation. Nor can the latter be foisted upon us as a corollary of the doctrine of evolution. It is true that the biological argument for the culture-epoch theory would be less tenable without the doctrine of evolution; but it does not follow, because our species is believed to be the result of successive variations from less complex organisms, that therefore the youth of the species should pass thru the successive variations from primitive man. If a theory of recapitulation definite enough to deserve practical consideration is to stand at all, it must do so by force of independent proof.

Now, such alleged proof appears to range itself chiefly under the biological, the sociological, the *a priori* psychological, and the historical argument. To begin by noting the first of these forms of evidence: Comparative anatomists tell us that the embryonic human brain, from its first appearance as a semi-fluid and shapeless mass, passes in modified form thru the several structures that constitute the permanent and complete brain of fish, reptile, bird, and mammal; and that the mode of development after birth to some extent recapitulates that by which the brain of the human species attained its present form and functions. Like the theory of evolution, the conception of parallelism rose at first no higher than physiological phenomena; later, by application of the principle of continuity and the doctrine of parallelism between brain states and states of consciousness, the correspondence of the stages of physical growth before birth with the pre-human series was read up into an analogy between the mental development of the child and that of the species. This biological argument has undoubtedly proved more coercive than any other, and it is certainly difficult to deny it general validity and significance. But a moment's reflection convinces us that, as an argument for the definite parallelism claimed by the culture-epoch theorists, it owes its weight largely to the fact that, while everyone can recognize its general direction, only the specialist can say how far it is modified by a more exact knowledge of facts. It must, however, be apparent to everyone that where the physical parallelism is best made out, namely, between the prenatal human and the animal series, there is no psychical analogy, and where the psychical parallelism is alleged to begin, the physical parallelism disappears or is obscured, no adequate basis for comparison having been laid in an exhaustive study of post-embryonic brain development in the child and post-simian brain development in the race. Before birth, physiological parallelism; after birth, indications of mental analogy; no common term. Even if we were assured of post-embryonic recapitulation in physical structure, we could not conclude to definite reproduction of mental function. The outcome of the biological argument seems to be that,

while the physical analogy between the pre-natal human and the animal series points uncertainly to some analogy between the mental development of the race and that of the individual, it is an inadequate support for a theory of definite correspondence.

In the sociological argument, the terms related, when relieved of their cloudiness, are incapable, at least in the present state of inquiry, of supplying a firm footing for the comparison of child and species. The gist of the contention appears to be that the social mind, like the individual mind, begins its experience with a "total real" which is gradually broken up and put together again, at first unconsciously, under the stimulus of daily needs and dominated by anthropomorphic conceptions, but later with growing definiteness of purpose in fulfillment of an increasingly conscious ideal set in a world-conception which is less and less anthropomorphic. But as the terms in which this progress are described are borrowed from individual psychology, and the social mind is an abstraction from individual minds, it is doubtful how far any real independence can be ascribed to the social series. On the other hand, an individual mind, viewed as uninfluenced by social forces, can have no concrete existence. Both of the parallel terms are abstractions. What seems to be true is that, in a historical survey of minds, processes can be abstracted which, in their collective aspect, show analogy with the stages of individual mental development. But this statement obviously supports the vague and not the definite theory of recapitulation.

The sociological consideration is helped out by what I have called the *a priori* psychological argument, based on the supposed nature of mind. Each stage of progress, it is said, must grow out of the preceding stage in accordance with a law of growth; must be essentially the next step. Hence the advance of the race and that of the individual, coinciding with the law, must coincide with each other. But this argument not only begs the question of the identity of any laws controlling race and individual growth, but forces beyond all evidence the notion of an inner regulative principle which fulfills itself regardless of changes in environment.

The historical argument includes a wide range of investigation. It especially seeks to make the theory more tangible by tracing stages of progress and decay thru the modes of thought, institutions, and ideals of particular nations, and relating these to similar epochs in the life of the individual. Studies in the beginnings of government, religion, morals, literature, natural science, industries, and the arts of representation, particularly drawing, are also thought to provide a wide basis for carrying out the assumed parallelism. But where exact verification is impossible, and both facts and terms wanting in precise definition, even a large number of analogies must fail to do anything more than create a presumption in favor of the doctrine.

Altogether, a glance over the evidence for the culture-epoch theory,

from the layman's point of view, tends to emphasize the judgment: unproved. That there is a high degree of general probability for some form of parallelism between the development of the individual and that of the race would probably, we repeat, be conceded by all. But the terms of the parallelism are undecided, the epochs indefinite, the evidence of corresponding stages full of gaps and ambiguities.

How, then, shall we look at the weight of authority which heralds the doctrine from many quarters and from thinkers as diverse as Goethe, Kant, Pestalozzi? The truth seems to be that the prominent men who refer to the theory or use it in their educational schemes have simply seized upon the conception in a loose, constructive fashion, without careful research or critical examination of evidence. An authority is not one whose dictum is to be taken without convincing reasons, but one who has demonstrated his ability to give such reasons. In this sense, no one of the older philosophers and educators is an authority on culture epochs. Some of the most famous whose names are quoted, as Goethe and Darwin, have but casually discussed or questioned the doctrine, while others, as Ziller and Hartmann, have been occupied in accurately dividing the years of childhood among the culture epochs rather than in finding a warrant for doing so. Some authorities, again, have apparently cherished the theory because it was to their minds the vehicle of a stronger conviction that the faculties of children ought to be developed according to some order. It seems, indeed, to be true that valuable conceptions have been reached thru the culture-epoch theory which might have been delayed without it, tho their truth is quite independent of it. But that is, of course, no more an argument for the doctrine than the facts discovered by the Chaldæans about eclipses are an argument for astrology. If authority is to count at all in our attitude toward recapitulation as a tenable theory, it must be simply to strengthen the undefined analogy between race and child which no one is disposed to question.

If the evidence for the theory, both as presented by its earlier advocates and as construed from the modern evolutionary and sociological point of view, is insufficient to recommend the culture epochs as a definite teaching, we have further to ask whether the application of the doctrine has proved itself so valuable, or at least so promising, as to incline us to dispense with proof. The difficulty of interpreting the theory is, of course, obvious. The child is to be guided thru the epochs traversed by the race. But epochs of what? Progress and development are far too abstract and general terms to direct us in fitting the race series to the individual series and concluding from the one to the other. That the correspondence should be a thorogoing one is manifestly impossible. If all the stages of race development were repeated by the individual, some of them must be touched so rapidly as

to be negligible. But all students of the subject admit the short-circuiting by which the individual, receiving thru natural selection or transmission of acquired characters the benefit of habit and accommodation, omits stages which were essential in the development of his ancestors. These short-cuts, it would appear, vary so extensively in different individuals that their occurrence alone would make it impossible to reason from race to child without constant modifications and exceptions. One marked illustration of the modification of the alleged parallel series is the relation between sensory and motor activity in the child and in adults of the earlier race. The receptive, sensory side of the child's nature unfolds under the stimulus of complex culture products and a highly developed ready-made language, while the productive, motor side lags far behind, the muscles and glands being of slower growth than the central nervous system. Thus, while the race has fed on its own culture products, even nature having in a sense grown along with man, the child has developed on products indefinitely in advance of his own active powers. But if the course of development in the individual as compared with that of the race is subject to short-cuts, foreshortening, shifting, and various marked changes of function and relation, what phase or aspect of growth shall we fix on to serve as basis for a comparison of stages? How has this difficulty been met by culture-epoch theorists?

Herbart supposed that the doctrine should be applied to the matter of instruction in history, literature, and language, and reached the somewhat amusing conclusion that Greek and Latin should be taught before French and Italian, and that Roman history — perhaps the least congenial of records to children — should precede modern historical tales. Herbart's dominant belief that the child should assimilate in order the traces of moral culture in the race was developed by Ziller, who, after a happy course in the *Odyssey* and *Robinson Crusoe*, led the children from the heroic and individual epoch thru the various stages of relation to the community represented by the patriarchs, judges, kings, the life of Christ, and the history of the apostles, ending in the Reformation and the catechism. Vogt took something from the Procrustean caste of the system by avoiding the attempt of Herbart, Ziller, and Hartmann to assign a particular year to each epoch, and Beyer broadened the conception by attempting to apply it to nature study — a field which Herbart had believed to be quite outside the principle; but otherwise the general features of the Herbartian scheme were retained, with, however, one important element of progress. This is the tendency to transfer the emphasis from the selection of proper culture products to study of the progressive movement of the mental life. Vogt made extensive studies in child nature in order to determine the characteristic phases of child development during the first fourteen years of life. But this new attempt, it is plain, has its value quite distinct from any question of recapitulation. So also Rein,

caring little for the mere material imparted in comparison with the quality of action and desire aroused, offers principles of guidance which are really based on study of the child in his relation to the ends of education, not in his relation to the development of the race. And, in general, it is impossible to review the history of the culture-epoch theory without discovering that, other things being equal, the theorists have contributed to pedagogical wisdom just in proportion as they have given over the attempt to get at the child thru the race and have addressed themselves to the slow and difficult task of getting knowledge about children at first hand. It is doubtful whether from Herbart to Baldwin all the schemes constructed according to the principle of recapitulation are worth, either in substance or in stimulus, one careful study of some phase of the child mind; and it is certain that the best thing about the culture-epoch theory is that it forgets itself and outgrows itself in single-minded study of children.

And, after all, the uselessness of the culture-epoch generalization in the field of concrete, practical investigation to which it has helped to lead is only what we should expect. There is no royal road to definite gains in education. Wide-embracing hypotheses like evolution and recapitulation enlarge our grasp, gratify our reason, strengthen our sympathies, give meaning to life; but they do not rectify our civilization nor provide us with school curricula. It is, indeed, easily possible, putting aside practical claims, to exaggerate the extent to which the reason may be comforted by the explanation which the theory of recapitulation is supposed to give of the mysteries of childhood. If it is the ordinary manifestations of child life which we wish to understand, we are, of course, putting our difficulty back into a more inaccessible region when we say: "The child mind moves in this fashion because the primitive mind did so before it." If it is an explanation of the less common, more individual, or more transient traits that we require, we run a risk of violating the law of parsimony when we advance reasons drawn from the remote past without having first exhausted the possibilities of recent causation.

The hypothesis of culture epochs is not, then, one from which, even if admitted, we could reason deductively; it is not yet defined with sufficient sharpness nor interpreted with sufficient certainty. We cannot teach or withhold anything at any period of the child's development simply because the race learned or did not learn it at a supposed corresponding period. The end of education is supplied in part by the demands of the civilization of which the child is to become a part; his own needs, the order of his development, and the subject-matter suited to its various phases can in the last resort be determined only by child study and by experimental psychology. The impression seems to be growing among us that the threefold root of the principle of sufficient reason for everything pedagogical is biology, sociology, and psychology. If this

means that the three are equally closely related to the problems of education, we must demur. Sociology may help to determine the end and the subject-matter as a whole; biology may clear up what psychology is of itself unable to explain; but the standard of reference is always the child, and the final arbiter and interpreter of data from whatever source, as well as the organon of knowledge about the mental elements and the laws that govern their connection, is psychology pursued under experimental conditions.

Whether or not the theory of recapitulation has in some degree made up for the errors and the barrenness which mark its chief applications by suggesting questions and pointing out what to look for, is matter of special investigation into the recent records of practical pedagogy. Since students of the new psychology have necessarily given themselves, in the first decades of the history of the science, to structural work, while the doctrine of evolution, with its allied theories, has seemed to shed generous light on the dark problems of psychogenesis, it would be small wonder if educators, somewhat blinded by the sudden illumination, should have turned aside after what prove to be strange gods. But whatever has been the service or the need of the culture-epoch theory in the past, it ought not to be required for practical use now that child study is in the way of defining its problems more precisely; and we may expect that in another decade those who have done pioneer work in structural psychology will be using the experimental method for the establishment of a sound basis of pedagogy — a basis which, as has been said, can acquire stability in no other way. Of course, as a supposition to be tested for theoretical validity, the culture epochs retain their interest. But as a practical working hypothesis, to be set in operation by the teacher and approved by the result, they are untenable and unnecessary.

Since, however, a general correspondence between race and individual development is admitted by all, we cannot reproach those who cling to the theory as suggestive and stimulating, provided they are not seduced by the charm of wide generalizations into admitting it as a guiding principle. If it be conceded that the doctrine cannot in ever so slight a degree take the place of experimental psychology, cannot be reasoned from deductively or used as a working hypothesis in practical pedagogy, we may welcome it as a point of view for all the value it may have in widening our conceptions or in teaching patience with the imperfect stages of child-growth.

THE PLACE AND DEVELOPMENT OF PURPOSE IN EDUCATION

BY DR. W. N. HAILMANN, SUPERINTENDENT OF SCHOOLS, DAYTON, O.

Purpose, the child of instinct and reason, is the more or less deliberate, conscious tension of the soul toward some definite object. This object is derived primarily from some experience in sensuous life — some experience retained in the memory, revived in the imagination, or lifted by the creative inferences of reason and fancy into the region of more or less ideal aspiration.

Purpose hungers and thirsts for achievement. From this it derives sustenance. Without this it must perish. For the sake of this it stimulates anew reason and creative fancy, that it may invent the means of success. In experiment and research it appeals afresh to sensuous experience. In the records of the past it looks for related precedents. In patient and laborious drill it gains needed skill and endurance. In impassioned eloquence it enlists the sympathy and help of others. In prayer it appeals to the Supreme Ruler for aid, demands even the impossible in its conceit. There is not a phase in the life of the soul that is not touched to the quick by the purpose that has taken possession of the soul.

In the discussion of the development of purpose it becomes necessary to indicate in a few words my fundamental point of view as to the meaning of life and education, the nature and place of will in mental life, and of purpose in will. That this cannot and should not be done in the guise of formal definitions appears from the fact that the terms involved partake of the infinite, and therefore of the undefinable. Nevertheless it may be done with sufficient definiteness to secure a fair mutual understanding as to the tendency of my thought.

In their application I shall limit my terms to "man." I make this reservation in order to guard the discussion from trespassing upon speculative grounds in connection with such terms as "life," "soul," "evolution," "self-activity," and "will." These terms are indispensable and will prove supremely helpful, if we steer clear of the maelstroms which hurl their victims to the dizzy heights of metaphysical speculation.

Life is a process of self-realization. The innermost essence of life is the instinct of self-expansion. Life is a process of becoming, a continuous growing toward what may lie more or less vaguely concealed in the depths of instinct, or stand revealed more or less clearly on the ideal heights of self-conscious will. Perhaps the most satisfactory term for this process is "evolution": the establishment of inner possibilities in the actual; the revealing of the eternal in the temporal, of the spiritual in the

material. Evolution, from this point of view, appears as the will seeking self-realization in the face of a resisting, external, objective world; self-activity appears as the momentum of the spiritual.

This resistance of the external, objective world should not be conceived as a hostile factor in the evolution of the will. It affords, rather, the necessary fixed points of support which render the operation of the will possible. The disturbance of the will by the resistance of the external world reveals the instinct of expansion in sensation, and lifts the will into consciousness. Thus, by the very limitations forced upon the will by the objective world, the will becomes aware of itself, of its freedom, and of its power. Unresisted will would result in nirvana. From this it is rescued by the necessities born in resistance from without.

On the other hand, in its purpose, in its conscious attitude and self-direction with reference to surrounding necessities, in its steady onward march toward the realization of the ideals summed up in whatever the soul may hold of faith, of hope, and of charity — in these the will is free. These proceed wholly from within. These the soul may hold fast in every hindrance and defeat. Indeed, it is their continued and continuous assertion that constitutes the evolution of man. Without them man is unthinkable; without them he must sink back into hopeless, loveless animality.

I have thus far looked upon will as practically identical with self-activity. Now, for the purpose of our discussion, it is necessary to view it in its two phases of outward and inward activity. In its inward life it appears as sensation; in its outward life, as spontaneity. In this view, sensation and spontaneity appear as the opposite poles of conscious self-active life. Sensation is analytic; spontaneity is synthetic. Sensation is primarily passive; spontaneity is primarily active. Sensation reveals the outer, spontaneity the inner world. Sensation is inductive, separates the general from the particular; spontaneity is deductive, applies the general to new particulars. Sensation discovers necessity; spontaneity overcomes it and conquers freedom — subjects necessity to its own inner law.

Sensation is the consciousness of the present; its income is stored in knowledge, which is the consciousness of the past; spontaneity applies the latter to its present in the relatively free control of a future. Yet the two are essentially one, distinct only as opposite polar phases of the one conscious life of the self-active soul. Self-activity in self-preservation appears as sensation; in self-expansion, as spontaneity. In sensation the self-active will discovers itself thru external opposition; in spontaneity it unites itself, creatively, with the outer forces, with the will of the world.

In this unfolding life of the self-active soul the term "purpose" designates the more or less definite, conscious aim of intelligent action or conduct. It is the more or less deliberate, more or less conscious tension of

the soul toward certain objects of achievement. In a narrower sense the term may apply to the intended outcome of even the most trivial actions; in a wider sense it includes the deepest attitudes and the highest aspirations of the soul.

Every phase of soul-activity is concerned in the formation of purpose. Every sensation holds its germs. Under the genial influence of love and hope it develops into a controlling factor of life. It stands revealed in thought, which sees and wills the blessings of its achievement.

Thus purpose appears as a mode of thought, of anticipating reason, of imagination turned into the future, of attention directed to some attainable object; in short, as the deliberate straining of self toward the realization of an idea or an ideal.

The high value of purpose in life is still further revealed when we consider the relation of individual purpose to universal purpose in the evolution of humanity. In individual purpose universal purpose attains consciousness, as it were. Thru individual purpose universal purpose accomplishes its end. The evolution of humanity is but the development of this end of universal purpose in its play with individual life. In the measure in which the individual realizes in his consciousness this end he sees God. In the measure in which he follows such consciousness in his life he does his duty to God, and his life becomes simply conscious evolution.

Thus we may say that with the birth of purpose, of conscious self-direction in the soul, man was born as distinguished from mere animal creation. Blind evolutionary forces were dethroned; the survival of the fittest took a back seat; foresight came to the front; and education—which is simply purposeful self-direction as applied to the race—assumed the reins of further development.

The sinking of the purpose tensions of the soul into the depths of instinct life, in habit or automatism, does not remove them from the field of purpose. Purpose, it is true, is born in the soul, whereas habits, automatisms, and heredities rest in the physical organism. But it is the constant and natural tendency of purposeful living to become established in the habits, automatisms, and heredities of the physical organism. Indeed, this constitutes the soul's method of self-actively controlling the organism in its further evolutionary development. The soul fixes, as it were, its evolutionary gains in habits, automatisms, and heredities, that it may be free for further conquests.

The importance of purpose as a paramount objective point in the education of the child is manifest from these considerations. Knowledge and skill are, indeed, indispensable; yet they are but ladder and sword in the hands of purpose. Purpose uses them as it may list, for good or ill; it is, with reference to them, "the man behind the gun."

Knowledge—the accumulated experience of the race—and skill—the

individual's acquired ability to use it for definite ends — are not by this lowered in value and importance. Without them "the man behind the gun" would cut but a sorry figure, would be powerless of achievement. To knowledge, purpose owes its ideas and ideals; to skill, the power and joy of achievement. With their combined help individual purpose rises to the heights of humanity.

Yet knowledge and skill are in themselves vain and ephemeral, the children of a day. But purpose is the first-born of the eternal will; if need be, it will secure knowledge and create skill in order to gratify the yearnings of the soul.

With commendable zeal and with great profit in its work, the profession has of late years discussed the value of apperception. Apperception is a phase in the process of mental assimilation, in which the mind, on the basis of former gains, assigns to new experiences their proper places in its treasure-house of living knowledge, and arrives at clearer, more definite, and more abstract conceptions of things and relations.

These apperceptional results, however, are very superficial and ephemeral affairs, unless they become rooted in the heart-life of purpose and find fruitage in living achievement. In order to become permanently and profoundly valuable mental possessions, they need to be intensified in another, deeper process of mental assimilation, for which I have proposed the name of introception.

In this phase of mental assimilation the new experience, after having in apperception assumed its proper place in the light of previous acquisition, enters the purpose-life of the soul, adding new vigor, new definiteness and ideality to whatever related purpose it may find in its new home. Thus it becomes an integral factor in the self-expansive, outward life of the mind-heart of man, reinforcing the movement by which this mind-heart of man steadily lifts itself out of mere seeing and doing into insight and foresight, and into creative self-assertion, the crown and glory of life.

I would not deprecate apperception; for in mental life both — apperception and introception — are equally indispensable. Mental life, which has it roots in experience, finds its completion or fruitage in achievement. Purpose mediates between the two, determines the direction of life, utilizes experience in conduct. On the side of experience, thought is apperceptive and results in knowledge or apperceptive ideas; on the side of achievement or conduct, thought is introceptive and results in conscious purpose or introceptive ideas. In apperception the mind forms pictures of its successive income from experience in terms of whatever related experience it may possess; in introception the mind places its apperceptive capital at the disposal of related purposes with a view to their better achievement. In apperception the mind adapts itself, as it were, to experience and environment; in introception the mind controls experience and

environment in the service of its self-active spontaneity. In apperception the world is revealed, in introception it is conquered.

The two are not antagonistic, but polar, phases of the same one mental process of assimilation ; the one turned inward, subjective, analytic ; the other turned outward, objective, synthetic. Thus the two are mutually interdependent ; they reinforce one another. They are to each other, if a different figure is admissible, like the depressions and elevations of waves. As in the disturbed sea depression and elevation follow each other in endless mutual interdependence, so in the agitated soul new knowledge stimulates and intensifies purpose, and new purpose increases and illumines the stores of knowledge.

This should constantly be kept in mind in our discussion, in order that we may escape the snares and pitfalls of one-sidedness. For every neglect of apperceptional life, every weakening of knowledge, or closing of the avenues of knowledge, must lower energy, clearness of purpose, and scope of achievement, as surely as the neglect of purpose and achievement in the traditional school is notoriously arresting development and dragging education steadily to lower depths of inefficiency, to flatter plains of mediocrity.

Similarly, as between purpose and achievement, it should be kept in mind that achievement is the logical outcome of purpose and its reason for being. Achievement, or the hope of achievement, adds joy to purpose and fills the soul with that serenity which insures vigorous, all-sided growth thruout the entire field of mentality. Purpose steadily deprived of achievement succumbs to the resulting depression, dies of inanition, and drags mind and man into its ruin.

These considerations indicate with sufficient clearness the road which education should go, if it would lead the life of humanity to purposeful efficiency. Resting its work upon the hereditary and cultural acquisitions of man, and dealing consciously and deliberately with the possibilities revealed in his nature and history, education becomes conscious evolution or, rather, as referred to mankind as a whole, conscious self-evolution. It seeks physical strength and vigor, intellectual sensibility and thoroness, earnestness and cheerfulness in work, a sympathetic and helpful attitude toward men and man, in order to secure the purposeful, beneficent efficiency in life which is the glory of human development. To this end all its measures and activities must tend. This is the educational kingdom of heaven to which, if it be gained, all else will be added.

For, by virtue of a natural reaction and because of the elemental oneness of the soul, this purposeful beneficent efficiency implies and, therefore, enhances that sympathetic and helpful attitude, that earnestness and cheerfulness in work, that keenness and thoroness of intellect, that physical strength and vigor, which education would seek as proximate ends of its efforts. Beneficent efficiency consecrates these things by placing

them in the service of duty, of devotion, of ethical and religious aspiration; by establishing them in the innermost as indispensable factors in the process of man's self-revelation as the child of a purposeful, beneficient Creator.

The fundamental requirement in the development of purpose is sense of power. Unless one feels that his purpose lies within his powers of achievement, he will not hold it fast. Purpose postulates faith in self and in the power of self, clear vision, the absence of doubt. These kindle in the soul the feeling of joy, the feeling which German seers have significantly termed *Werdelust*—the joyous sense of becoming, of growing mastership, of increasing freedom, the dawn of a better state.

In due time there is added to this sense of power a moderating prudence which guards achievement against the dangers of rashness and ignorance, teaching what *may* be done, if success is to crown effort. There is added, furthermore, a due subordination of measures to the compelling "you *must*" of outer necessity. At last, under the benign influence of sympathy, the sense of the imperative *ought* enters the soul, and man is ready under the sway of reason and love to do whatsoever he *wills*.

Thus these five—I can, I may, I must, I ought, I will—name the successive rounds of the ladder by which man rises into his divine heritage of freedom.

Self-activity implies, seeks, freedom. Freedom is the essential condition of growth. Therefore, the first requirement of rational education is to set free the youthful forces in purposeful play and purposeful work, in a wisely chosen and wisely guarded environment. Neglect of this breeds discouragement, stubbornness, hypocrisy, wretchedness, a practically suicidal life.

The very complexity and preponderance of the muscular machinery in the human organism, and the intimate blending of its ultimate fibers with the nervous tissue, declare plainly the yearning of the soul for self-expression, for self-assertive activity. The immediate muscular response to any stimulus in earliest infancy reveals the soul's thirst for activity. "Let *me* do it!" is the first and most persistent request of childhood, as it begins to realize its creative possibilities.

Joyful activity—and this alone can secure growth—implies freedom to do, the achievement of purpose. Ideally speaking, therefore, restraint is unpedagogic. In the vocabulary of ideal pedagogy there is no such word as "don't." Whenever the teacher uses this word, he may be sure that it is forced upon him by lack of knowledge or skill on his part, or by stubborn conditions which he cannot control.

Ideally, education with reference to the child is following rather than prescriptive, suggesting rather than commanding. It controls thru environment. From this proceed its opportunities and invitations to do. In this, too, in its inherent necessities and compulsions, lie the countless

temporary and legitimate restraints which result on the pupil's part in patience, perseverance, self-control. These necessities and compulsions he ultimately learns to utilize deliberately for his purposes in the subordination of environment to his self-liberated will.

This is the gist of the problem of education: so to adjust the pupil's environment that he may engage in right activities freely, successfully, joyously; that all invitations to such doing, all motives and purposes involved therein, may lie in right directions, toward greater strength, health, and benevolence. Thus will education overcome false heredities, and secure right tendencies, right habits, right thoughts and feelings, right hopes and aspirations; and against the spiritual momentum of these subsequent external failure and temptation will have little power.

True, full education must become to the pupil, even in the school, a process of continuous self-revelation. It must place man into conscious possession of his destiny, of the means for its fulfillment. It must deliver him from caprice and license, and make of him a free wielder of the recognized forces and laws of his life, a consciously self-active factor in the evolution of humanity.

It is manifest that such an education can no longer be satisfied with the mere imparting of knowledge, nor even with the merely theoretical inculcation of principles of thought and action. Henceforth education must learn to touch and stir the whole being of the child in every direction. It must learn to seek its criteria at every stage of its work, in the immediate output of the pupil's life. Not what the pupil may have or get is of ultimate importance, but what he can do or does with himself right now, and the spirit in which he does these things.

The school must learn to lead the pupil to efficient practical life thru an efficient, more or less ideal full-life, adapted to his growing powers and scope. Possibly the kindergarten will furnish the pattern for this.

Possibly the marvelous ideal which Goethe presents in the "pedagogic province" of his *Wilhelm Meister* may point the way. Here, at every stage, the pupil is in efficient full-life. He produces, creates, uses his knowledge and skill in a practical efficiency in which he has an absorbing, self-active interest. At the same time he is an earnest, untiring seeker after wider and deeper knowledge, after better and surer skill, that his efficiency in his chosen work may grow. All that he knows and can do is ever concerned in productive or creative output. His education is not a *preparation* for life, but an earnest, joyous *living* into life.

The field for discussion and endeavor opened by these considerations is so vast that I must content myself with pointing out a few of its prominent features.

First and foremost among these is the importance of hand-training and of the value of work in education.

Even when considered merely as the seat of touch, the hand stands

pre-eminent in the sensuous development of man. All other senses combined are unable to lift man out of the passive subjectivity and wretched helplessness of Condillac's statue. To the hand, as the seat of touch, man owes the discovery of space and mobility, of himself and the world. Then, taking the other senses under its tutelage and entering upon its divine career as a worker, the hand becomes the inventor of language and art, the patient builder of science and industry, the revealer of love and duty, the very liberator of man, whom it enthrones in glorious supremacy as lord of all created things.

Every mental act is stimulated, strengthened, enriched, spiritualized by manual activity. As already indicated, it is by the sense of touch, and by a variety of muscular movements of which the hand is the chief organ, that sensations lose their barren subjective character and are lifted into a fruitful, objective reality. Without this reality, interest, purpose, hope, aspiration, and the will are unthinkable; without it reason, imagination, and memory could not rise above the horizon of possibilities, and sensation itself must sink back into the sleep of hopeless apathy.

It is a generally observed and conceded fact that the manual representation of things in the kindergarten, and, later on, the drawing and modeling of the elementary school, more than aught else assist the minds of the children in freeing individual percepts of accidental features, in reaching clear concepts, and in finding the unities that rule in law and principle.

It is an almost equally well-attested fact that manual training in advanced schools effects a notable gain of interest and power of assimilation and retention in all studies, and, consequently, an equally notable saving in time and effort on the student's part in the accomplishment of his tasks. This is the more significant when it is remembered that in the great majority of instances manual training in these advanced schools is educationally still in an unsatisfactory condition—not vitally related to other school studies, having only a remote bearing on practical life-efficiency, and little connection with the self-active purpose-life of the pupil.

If, in spite of these imperfections of the manual training of our day, its influence upon the intellectual and moral development of youth is so favorable, we are justified in anticipating still more precious results from it when the school of the future shall have learned to connect it rationally and naturally with the self-active purpose-life of its pupils, to make it directly tributary to the work of the school in every direction of thought and study.

The choicest contribution of purpose-life to man's equipment is language. Thru language the purpose of one becomes the purpose of many. Thru language the soul makes known its wants and needs, its hopes and yearnings, and brother-souls hasten to the rescue. It is the medium of

organization among men, the indispensable condition of institutional life. It holds fast the past; it determines the future. As the hand is overcoming space, so the tongue is conquering time. Combined, the two are subjugating nature and heredity, and are gaining for man the conscious control of his own evolution.

It is significant that in its origin language seems to be intimately connected with the work of the hand. With the exception of a few imitations of sounds and a number of cries expressing pleasure or pain, there is scarcely a word, however spiritual in its present application, which philology cannot plausibly trace to some manual activity. Indeed, manual doing in play or work is essentially connected with language. The call for help in work in the achievement of a common end is the purpose and justification of language.

In language the family is founded. Society owes its origin and development to language. Thru language man has entered humanity. History, science, philosophy, and the prophetic control of the depths and heights of being which knows not limitations of time or space or causality are the gifts of language.

The functions of self-establishment, of self-assertion, are possible without language. Man may maintain himself in a measure against nature and created things with his hands alone. He may even reach a certain degree of brutal supremacy over these things. But in his purpose-life he cannot without language rise beyond the narrowest individual needs. In his purpose-life he would remain hopelessly centripetal, fiercely egoistic. Without language he would know neither father nor son; he would have neither friend nor neighbor; his wife would be to him only a female; his children, offspring. He might protect them for a time, as other animals do, under the sway of the race-perpetuating instinct; but in due time he would know them only as feared or hated rivals in the race of life.

From this inferno only language and his hand have saved him. These have made even the pains of self-establishment sweet to him, by adding to them — and as resting on them and conditioned by them — the delights of self-expansion, the glories of self-devotion, the peace with which a life of duty crowns the sons and daughters of man.

It is needful, however, to remember that all these achievements of language have come to man and can be maintained by him only thru the mediation of the hand, as the typical organ and symbol of beneficent efficiency in life. The word becomes effective in the life-conduct of man in the measure in which it sets to work the hand. It may be the hand of him who speaks the word, or the hand of a brother, or the joined hands of many. The word may move the hands of men right here and right now, or it may do so after many days and at great distances. Its burden may be the fleeting stimulus of a moment, or a lasting inspiration for

countless ages. Yet, in all instances, it is in and thru the work of these hands that the word lives.

Thus are we justified in claiming that among the high and holy things of life, work is the highest. It is the fruitage and outcome of life. Its very essence is creativeness, the imposing of the law of the worker upon his world. Nor does the word thereby lose in dignity and worth. For word and work, in full life, are one. To separate them is to rend asunder soul and body. Alone the word is mere wind. Alone work is a dull, unmeaning, heavy thud.

I would emphasize at this point the responsibility of education with reference to the social development of the child. Perhaps I should rather say, with reference to the evolution of society.

Society is laboring earnestly for organization. It seeks to establish certain social functions in reasonably responsible social institutions. It is strenuously seeking to rise out of the tyrannies and anarchies of an irresponsible individualism into an orderly democracy of social solidarity.

In its turn, individualism is contesting every inch of the ground. While denying the very legitimacy of social organization, it turns into its channels even the institutional gains of society. It preaches the sanctity of vested rights, the holiness of competitiou, the divinity of *laissez-faire*, the gospel of "loaves and games." A deceptive casuistry and sophistical appeal to the most sordid instincts of the so-called masses and classes, and the hypocritical assumption of benevolence, enable it not only to hinder social evolution, but frequently to turn it back.

On the other hand, social solidarity is not hostile to individual development. On the contrary, individual efficiency and well-being are not only the paramount means, but the very end of its functional life. Whatever heights of mastership and control, of peace and joy, individualism may have climbed, vanish into the lowlands when viewed from the elevated plateau upon which social solidarity would place its humblest individual members.

Probably this very fact accounts for the fatherly way in which society carries on the contest. Society loves the individual, for in and thru the individual society lives. Society recognizes the intrinsic worth of the very qualities that have made individualism its foe. Society recognizes even in the perversions of individualism elements which are essential to social solidarity. It would, therefore, convert rather than destroy. It is ever hoping for the return of the prodigal upon whom it would bestow its choicest treasures.

This conversion society would bring about thru education, viewed as the fundamental process in the self-evolution of humanity.

Education, then, is more than a mere social institution, vastly more than a mere organ of social solidarity. It is the revealing in conscious activity of the very purpose of social existence, the continuous achievement

of this purpose. The family, the church, the state, are its organs. So is the school one of its organs, probably a secondary organ, but, for this very reason and because of its nearness to the child, of primary importance. The family, the church, the state, industry and commerce, science and art, owe their very being to education. Without it they must sink back into the tyrannies and anarchies of individualism, and perish in the natural animalism of man.

This fundamental character of education, at least in its application to the social solidarity of the state, stood clearly revealed in the gigantic intellect of Plato. In its application to the life of humanity it was luminous in the mind of Kant. It shines forth in solar splendor and life-stirring warmth in his panegyrics of duty and good-will. In its bearings upon the work of the school it was felt and heeded by the loving souls of Pestalozzi and Froebel. In our own land Horace Mann and Henry Barnard are its very incarnation. Today it is steadily, tho slowly, entering the practice of the elementary school and, in a way, even of the high school and college.

The more general recognition of this vast responsibility of education constitutes the soul of what has come to us quite recently as the new education. The old education sought its criteria in tradition, in the achievements of the past, in static perfection. The new education would seek its criteria in the epiphanies of advancing insight, in the progressive aspirations of the future, in the up-tending ideals of dynamic development. The old school was satisfied with a certain degree of individual excellence in knowledge and skill; benevolence and social efficiency in life took care of themselves. The new school would actively direct all individual excellence into channels of benevolence and social efficiency.

It may be true that the full realization of the requirements of this new education is impossible in our day. The school may, indeed, for decades find it difficult to cut loose from traditional idols which hold it captive in trammels of cant and routine. It may be compelled still to subordinate in many ways the deeper interests of the pupil to narrowing aims of public-school economy, to anti-social modes of seating, to depressing and repressing do-nots and shall-nots, to artificial courses of study and modes of classification, to catechismal recitations, to unworthy competitions and demoralizing incentives galore.

Yet this need not discourage us. Rome was not built in a day. The American continent was not born in an hour. Evolution has moved toward its goal for ages; and yet its work is but begun. Impatience is for children and fools. So is revolution. Insight came to us in the age of manhood, and the Giver of it expects of us the spirit of manhood.

We have been shown Truth, that we may love her. We have been taught the history of her struggles, that we may have faith in her leadership; that we may patiently bear hardships and difficulties and seeming

defeat as temporary soldiers in her service. Above all we are enjoined to be patient with brother-men who see not as we see. No true man deliberately serves error. Yet an imprudent defender of truth may stir up dust-clouds of stubbornness and self-conceit, eclipsing the sun of truth.

Not that *we* should conquer is the purpose of our being, but that we should, to the best of our ability, patiently, resolutely, trustfully, aid the cause intrusted to our keeping. After us there will be others.

VICES OF CHILDHOOD AND YOUTH

BY J. W. DINSMORE, SUPERINTENDENT OF CITY SCHOOLS, BEATRICE, NEB.

Vice in itself is any transgression of morality. In the individual it is a conscious and habitual transgression. One may have yielded to temptation and not be "vicious." Those only are so catalogued who have acquired habits of evil.

DECEIT

Perhaps the first vice to appear in a child is *deceit.* It is observable at a very early age, and is practiced consciously at less than two years. Little surreptitious acts, known to be forbidden, are performed either maliciously or defiantly, the offender keenly watching the mood of mother or nurse, and judging thereby of his own safety. So spontaneous and natural are these little acts of deception that they savor strongly of heredity. But it is doubtful if the amount inherited would lead to serious results. If the child should find, as he developed, that deceit was not practiced by parents and friends, there is little doubt but that he would give it up.

But where older children practice it upon their smaller companions, their parents, and each other, the habit will very readily be acquired by the child. The mother sometimes sets an example of deceit by effusively greeting a caller whom the children know to be unwelcome, or apologizing for a state of things that is quite the usual order. In school it is most in evidence in examinations, reading forbidden literature, passing notes, eating sweetmeats, and the like.

LYING

Closely connected with, and usually accompanying, deceit is lying. This vice may be learned in a variety of ways, but in the great majority of cases it is acquired by observation and imitation.

As rewards and punishments are meted out by very many parents and teachers, skillful lying is one of the most valuable accomplishments a child can possess.

The great difference in children in respect to veracity is partly due to the nature of the child and partly to training and environment. Some are so sensitive that the least deviation from truth is painful to them, while others become adepts at lying, and appear indifferent as to its results. In spite of the prevalence of this vice, it is held in poor repute everywhere. No greater insult can be given than to call another a liar. A man may stand a torrent of abuse, until "the lie" is given, when he flies into an ungovernable rage. Probably three-fourths of the fights of boys occur because of "the lie" being passed. From this it seems that truth-telling is more universally held in high esteem than any other virtue.

Lying arises from three general causes: first, from a strong imagination, like that of Arthur Bonnicastle, who was guilty of the grossest fabrications, in which he usually played the rôle of hero; second, for gain, as in trade and barter; and, third, to escape punishment or disgrace. Most children have a weakness in one or more of these directions, and should be treated according to the offense. The best remedy in all cases is kindness and sincerity on the part of parents and teachers. As a rule, both children and grown people tell the truth to those whom they love and respect. When parents make promises to their children without being careful to fulfill them, or threats which are not carried out, they lose the confidence, and merit the just contempt, of the little ones.

STEALING

Where deceit and lying abound, one is not surprised to find stealing.

The instinct of ownership is one of the endowments of the race, and appears in the child in the second year of life. It is this sense that prompts him to appropriate whatever seems desirable without any consciousness of wrong. It is not likely that a child of himself would see any harm in stealing short of maturity. Uncivilized countries regard this vice as a virtue, and some civilized countries look upon it not unfavorably. The Spartans considered skillful thieving a virtue and an accomplishment. It was part of a boy's education. He was punished for it only when done in a bungling fashion. In quite modern times conquering nations have not hesitated to appropriate the possessions of their vanquished opponents. Napoleon in this way enriched France, and in fact this kind of stealing has not been wholly abandoned by any great nation. If we believe the child to be the exponent of the race, we shall not be surprised if he shows a disposition to seize and appropriate by force or cunning whatever strikes his fancy. But in favorable surroundings the tendency is soon overcome, and only a comparatively small number of children can be classed as thieves. This is true in all good communities, but among the ignorant and poverty-stricken it is quite prevalent, while in the slums of the cities it is the rule rather than the exception.

Stealing appears to be the most prevalent of all criminal vices. Many more than one-half of all the convicts in the state penitentiaries and of reform and industrial schools have been sentenced for some kind of stealing. This is not true of female offenders. Statistics show that most of the latter have been sentenced for crimes against society—begging, prostitution, and vagrancy. The major part of thieving done by juveniles is not from choice, but necessity. Idle and drunken parents send their children out to beg or steal, as opportunity offers. The child knows no moral distinction between the two. If he goes back empty-handed, he is punished. His lot is a hard one. He is a stranger to love, kindness, sympathy, and comfort. He is underfed, miserably clad, neglected, abused. His parents and associates are his enemies, and he has no claims upon society. He is an outcast. All such should be considered as unfortunates rather than criminals. They are the inevitable result of our twisted social fabric. They must be dealt with, not to protect society, but for their own sakes. So long as we look upon them mainly as a menace to society, our hand is against them and theirs against us. They should not be punished, but helped, loved, encouraged. Where a specimen of this sort is treated cruelly he is cruel. Where treated with indifference he is indifferent. When he shall be treated with love, will he not be lovely, for is not love the greatest power in the world? "Love never fails."

The industrial school, by means of kindness and regular habits, is able to reclaim a large proportion of those intrusted to its care, but only a few out of the great army of children who are daily becoming thieves are so reached.

GAMBLING

Gambling is recognized as one of the greatest evils of the age, yet one looks for it in vain as the cause of imprisonment in penal institutions. Laws against gambling are for the most part dead letters. The reason is in the nature of the vice itself. The man who loses his money at the gaming table cannot prosecute one who robs him, because he is himself equally guilty. The wife has no redress when her husband loses his all without involving him in the punishment, as the law makes no distinction between the winner and the loser. Local laws, imposing fines and terms in jail, check but little this growing evil. All this is unfortunate, for gambling is more seductive in its nature, and far more destructive to morality, than theft. The respectability of gaming, the coolness and keenness of intellect required, the element of danger, the daring, the applause incident to winning, the possibility of large gains and a life of ease, all go to make the life of the gambler a fascinating one. It is one of the most popular evils in the land. Men who call themselves good and moral citizens bet their money on elections, horse races, ball games,

boat races, anything in short that offers a chance for winning. Boys, with their keen interest in whatever men do, think it manly to follow their example. Playing marbles for keeps is one of the earliest forms of gambling. The difference between it and other forms is one of quantity and not of quality. Boys have marbles, men have money. Each stake what they have to win or lose. From marbles for keeps it is matching pennies, then the nickel in the slot, then games of chance, and the habit is formed.

Boys thus learning to gamble lose all interest in school and books, play truant and manufacture lies to deceive parents and teachers. It leads to sabbath-breaking, and often to chewing and smoking, in order to be more manly and abandoned. Add wine and the prostitute, and the boy is a true "sport."

Thousands of boys every year go thru this experience. Many look eagerly forward to the time when they can indulge freely in sporting amusements. They read the sporting news with all-absorbing interest. They are more familiar with the champions of the wheel, the diamond, and the ring than with the characters of history. Their admiration for some famous pugilist amounts almost to adoration. If the teacher could arouse the same interest in the characters of history, she would never have cause to complain. Even local sports have a large circle of admirers among the boys. How the evil shall be met is a problem burning for solution.

Kindred to this and the vices already discussed are

VULGARITY AND IMPURITY

The minds of children, especially boys, are everywhere poisoned by impure, vulgar, and obscene words and expressions. Wherever idlers congregate bad language is used, vulgar stories are told, evil thoughts find expression, the most sacred relations are profaned. The vice of vulgarity is so common that a boy can scarcely be sent to a neighboring grocery without danger of contamination. In barber shops, livery stables, railroad stations, and such places boys get their education in profanity and obscenity. In looking over the occupations of convicts in penitentiaries one is struck with the great number of barbers. The cause is manifest. Almost every barber shop keeps a stock of sensational literature, and pictures of pugilists and actors in tights on the wall. Frequenters and customers thus find the way open for gossiping upon the latest sporting news or sensational stories. So tainted is the moral atmosphere that there is scarcely a boy thirteen years of age who is not familiar with the vilest street terms.

Professor De Motte, in his lecture on "The Harp of the Senses," says a girl may travel with her mother from New York to San Francisco and back and never hear a vile word, but a boy cannot travel with his father

for a single day without being exposed to contaminating language; and he demands that society shall give the boy the same chance to be pure that his sister enjoys.

Touching impurity, I cannot do better than to quote from the letters of men high in authority. Regent E. von Forell, chaplain of the State Industrial School for Boys at Kearney, Neb., says: "It may not be generally known, but it is true, that there is a systematic recruiting of boys and girls to take the place of those so far gone in disease that they can no longer give their bodies to earn their bread. Boys are induced to enter dens of iniquity and are led astray long before puberty, and when once entrapped are used to persuade other boys to enter." Regent Forell calls prostitution the greatest sin of the age, and says the evil of tobacco and alcohol appears like a joke when compared with it.

Josiah Strong, of New York city, writes as follows:

> In a Pennsylvania city I was assured that girls thirteen or fourteen years old solicited traveling men on the streets, taking them to their own fathers' houses. The corruption is widespread. The active cause of this condition of things would seem to be the extensive distribution of obscene literature, both through the mails and by hand. Men fill their grips and pockets, step onto platforms when the train stops, with a quick eye pick out the young fellows of the right sort, put into their hands specimen pages which give information how to get more, tell them to pass it around, jump onto the train, and are gone. Sometimes they distribute the poison to the school children on the playgrounds.

Anthony Comstock, secretary of the New York Society for the Suppression of Vice, considers licentiousness and self-abuse the greatest vices of childhood and youth. He says: "The overwrought stories of social vices, as told in the daily papers, the baneful illustrations of the weekly illustrated criminal papers, the exciting and pernicious dime novel, the disgusting displays of bill-boards, fences, and sides of buildings, all bid for the destruction of the purity of childhood and youth. The results are seen on every hand. The harvest of this impure seed-sowing is a seared conscience, a broken constitution, mental, moral, and spiritual death."

THE AGE OF CRIMINALS

Statistics of prisons and reform schools, while they show the age of delinquents at conviction, do not tell us when these unfortunates began their career of crime. In a great majority of cases they are habitual offenders before being brought to justice. The criminal instinct shows itself at a very early period in life. A large proportion of the habitual criminals are on record as law-breakers before they are out of their teens. The age of females entering upon a life of crime is greater in proportion to the number than that of males. This is partly due to their better protection at home and partly to the kind of crimes committed by them. According to Morrison, 26 children in every 100,000 of the juvenile population under the age of twelve were

convicted of indictable offenses. Of the juvenile population between the ages of twelve and sixteen years 261 in every 100,000 were convicted of indictable offenses. Between the ages of sixteen and twenty-one years 330 in every 100,000 of the juvenile population were convicted of indictable offenses. This shows that juvenile crime steadily increases in amount the nearer maturity is approached.

HOW THE CRIMINAL RANKS ARE RECRUITED

While all good people hate sin for its own sake and deplore it for its effect upon humanity, and while leagues for social service, and for the suppression of cruelty and of vice and crime, have been and are being organized; while the schools, the churches, and the charitable boards are anxious to prevent the spread of evil and to uplift humanity, the hosts of wickedness are not idle. The enemies of righteousness are thoroly organized, armed, and equipped for the spread of evil. They spare neither time nor money in enticing boys and girls into sin. Music, pictures, gaudy attire, gayety, comfort, indulgence, deceit, treachery, and dishonesty are all coupled with the greatest skill ingenuity can invent to tempt the young, to entrap the unwary. Alcohol, both as the cause and the effect of crime, is so well-known that we have not taken the time to show the great proportion directly or indirectly traceable to it, but the methods of training boys to become drunkards is worthy of notice. Every saloonkeeper knows that first-class customers do not last many years. The greater their patronage, the shorter their career. When their money is gone they are useless, and their places must be filled by younger men. Thousands of boys must become patrons every year, or the saloonkeepers would be compelled to go out of business. Some two years ago there was published a statement from a brewer in an address to saloonkeepers advising them to be generous in treating boys. Nickels invested that way would bring dollars into the till a few years later. The choicest cake, puddings, and confectionery are flavored with wine or brandy to decoy the young and the weak-willed.

Tobacco is likewise put into convenient and enticing form with the purpose of alluring boys to its use. An alarmingly large percentage of boys in towns and cities show the effects of cigarette-smoking before they leave the grammar grades. Teachers are so familiar with its deadening effects that they can pick out at a glance those who have become addicted to it. It is significant that 90 per cent. of the cigarette fiends who enlisted for the Spanish-American war were rejected as physically incapacitated. A well-organized and vigorous war upon the manufacture and sale of cigarettes would be more in the interest of humanity than any that has yet been inaugurated.

Two articles in recent numbers of the New York *Independent* show how professional tramps recruit their ranks by systematically and effectively

working upon the minds of boys from ten to fifteen years of age. Scores of such are being added daily to this menacing army, thinking to lead a life of ease and adventure. When entrapped they are made to beg, steal, and wait upon their captors, who treat them cruelly, but from whom they are unable to escape. They come eventually to accept the life, miserable and hopeless as it is, and simply look forward to the time when they shall have graduated from their servitude and shall be able to practice the same cruelty upon other boys.

The above are but a few of the ways by which the young are led into sin and crime. It is a painful subject to dwell upon, but cannot justly be closed without referring to one that in moral turpitude overshadows all the others. Such books as William T. Stead's *If Christ Came to Chicago* and Mrs. Charlton Edholm's *Traffic in Girls* well illustrate the evil referred to. The latter especially describes how young and beautiful girls are entrapped by the snares of false employment, mock marriage, drugs, the dance, and starvation wages, and smuggled or enticed into houses of infamy, from which there is no escape.

What is needed is more light. Concealment of crime has become a science. Evil must work in the dark in order to thrive. Criminality would almost cease to exist if thoroly exposed. Idleness and ignorance go hand in hand with vice and crime. Knowledge, courage, and an untiring devotion to humanity will in time overcome evil and usher in the millennium.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—Wednesday, July 12, 1899

The session of this department was opened in the auditorium of the Los Angeles High School, at 3 P.M.; President Edward F. Hermanns, Denver, Colo., in the chair; F. H. Clark, San Francisco, Cal., secretary.

Upon motion of W. H. Housh, Los Angeles, Cal., the appointment of a committee on nominations was ordered. Later President Hermanns appointed as the committee:

Principal O. S. Westcott, Chicago, Ill. Principal W. H. Housh, Los Angeles, Cal.
Superintendent L. E. Wolfe, Kansas City, Kan.

Mr. A. E. Baker, of Los Angeles, chairman of the Local Committee of Arrangements, invited the members of the department to a reception for the coming evening at Blanchard Hall, tendered by the Local Department Committee and the faculty of the Los Angeles High School.

Mr. A. Horatio Cogswell, of Los Angeles, favored the department with a vocal solo.

Principal Gilbert B. Morrison of the Manual Training High School of Kansas City, Mo., presented the first paper of the afternoon's program, upon the subject, "Do Our High Schools Prepare for College and Life, in Accordance with the Present Requirements of Both?"

Discussion was opened by Dr. A. F. Nightingale, of Chicago, who was followed by Principal William H. Lynch of Mountain Grove Academy, Missouri; Principal O. S. Westcott, of Chicago; Superintendent L. E. Wolfe, Kansas City, Kan., and Principal W. H. Housh, of Los Angeles.

Professor J. W. Crabtree, inspector of accredited schools of the University of Nebraska, presented the second paper of the afternoon, upon the subject, "Should Arithmetic, Grammar, Geography, and History of the United States be Reviewed in the High School?"

J. H. Lewis, state superintendent of public instruction, St. Paul, Minn., opened the discussion with an account of the experience of Minnesota in introducing the review of the common branches into the high school. The discussion was continued by Principal E. W. Coy, Cincinnati, O.; Superintendent J. F. Keating, Pueblo, Colo.; Miss Davis, Los Angeles, Cal.; Principal Allyn O. Taylor, Benicia, Cal.; Principal O. S. Westcott, Chicago, Ill.; J. H. Miller, Lincoln, Neb.; Miss A. F. Olcutt, Ishpeming, Mich.; Principal J. F. Lynch, Mountain Grove, Mo.; and Superintendent Hugh J. Baldwin, San Diego, Cal.

At 5 o'clock the department adjourned, to hold its next session in conjunction with the Department of Higher Education.

JOINT SESSION OF SECONDARY AND HIGHER DEPARTMENTS.—Thursday, July 13

The joint session of the Secondary and Higher Departments, to consider the report of the Joint Committee on College Entrance Requirements appointed at the Denver meeting,

1895, was called to order in Temperance Temple at 3 o'clock by Edward F. Hermanns, president of the Department of Secondary Education. F. H. Clark, secretary of the same department, acted as secretary of the joint session. Copies of the report were distributed among the members of the departments.

Dr. A. F. Nightingale, superintendent of high schools, Chicago, Ill., chairman of the joint committee, presented the subject-matter of the report, discussing its provisions and making further recommendations, especially that a new committee should be appointed to perfect the work in science.

The discussion of the report was opened by President Joseph Swain, Indiana University, Bloomington, Ind., who read portions of the report and discussed its leading principles.

He was followed by Principal E. W. Coy, of Cincinnati; President James H. Baker, of Colorado; Principal H. L. Boltwood, of Illinois; President William H. Black, of Missouri, and President David Starr Jordan, of California.

The Pasadena High School Young Ladies' Quartette entertained the audience with music, and for an encore gave a pretty little song of welcome to the National Educational Association, arranged for the occasion by Miss Edith Parker.

To dispose of the report, President Swain introduced a resolution of indorsement and approval; but the following motion was, after some debate, adopted by the joint departments:

Resolved, That in view of the fact that the carrying out of this report would make many radical changes in our high-school work, and that so few members have had opportunity to read the report, further consideration of it be postponed one year.

L. W. Babcock, Ukiah, Cal., moved the following, which was unanimously adopted:

Resolved, That a vote of thanks be extended to the committee for its careful and conscientious report.

After a song by a male quartet composed of the following members of the association, W. H. Ressler, H. J. Boke, F. O. Mower, and L. T. Merwin, the joint session of the departments was adjourned.

SECOND SESSION.—FRIDAY, JULY 14

The final session of this department for the Los Angeles meeting was called to order in the auditorium of the Los Angeles High School at 3 P. M.; President Edward F. Hermanns in the chair.

The program was opened by a mandolin and piano duet by Mr. and Mrs. Monlux, of Los Angeles. This was followed by a vocal selection by a quartet of members of the department — Messrs. E. D. Ressler, H. J. Boke, F. O. Mower, and L. T. Merwin — who received a hearty encore.

The following report of the Committee on Nominations was read by the secretary:

Mr. President and Members of the Department of Secondary Education:

Your committee, after mature consideration, respectfully submits the following names for the officers of this department for the coming year:

For *President* — E. W. Coy, Cincinnati, O.
For *Vice-President* — G. B. Morrison, Kansas City, Mo.
For *Secretary* — H. L. Boltwood, Evanston, Ill.

(Signed) O. S. WESTCOTT,
L. E. WOLFE,
W. H. HOUSH,
Committee.

Upon motion of E. D. Ressler, of Eugene, Ore., it was unanimously ordered that the report be accepted, and that the secretary be authorized to cast the ballot of the department for the nominees. This being done, the above-named gentlemen were declared as officers of the department for the ensuing year.

The first paper of the afternoon, upon the subject, "The Ethical Influence of the Study of Economics," was written by Byron C. Mathews, City High School, Newark, N. J. Mr. Mathews was unavoidably absent, and by special authorization of the executive committee of the association the paper was read by Superintendent J. F. Keating, Pueblo, Colo.

President Hermanns suggested that the discussion of the paper be deferred until after the reading of the second paper of the afternoon, as the subjects were similar.

The audience was again favored with a vocal selection by the quartet.

President Sylvester F. Scovel, University of Wooster, Ohio, then presented the second paper of the afternoon, upon the subject, "In Fundamental Civil Ethics, What Ought We to Teach as the American Doctrine of Religion and the State?"

President James H. Baker, University of Colorado, opened the discussions of the afternoon, confining himself mainly to the second paper.

The paper of Mr. Mathews was discussed by Superintendent J. F. Keating, Pueblo, Colo.

At 5 o'clock the president declared the sessions of the department adjourned.

FREDERICK H. CLARK,
Secretary.

PAPERS AND DISCUSSIONS

DO OUR HIGH SCHOOLS PREPARE FOR COLLEGE AND FOR LIFE, IN ACCORDANCE WITH THE PRESENT REQUIREMENTS OF BOTH?

BY PRINCIPAL GILBERT B. MORRISON, MANUAL TRAINING HIGH SCHOOL, KANSAS CITY, MO.

Any discussion respecting a preparation for life presupposes an ideal of life's objects. My own opinion of what constitutes a proper course of study and training as a preparation for life will be accepted as sound or rejected as faulty to the same extent that my ideal of what an education is for agrees with or differs from yours.

I assume that the objects of life are happiness, contentment, and usefulness to others. All of these depend upon a true interpretation of the environment and an adaptation to the requirements of physical, moral, and intellectual law. The present requirements of life differ from those of the past only as they involve a fuller comprehension of nature's laws, forces, and possibilities. Happiness is conditioned upon the complete mastery of the principles underlying the vocation which is to be followed for the gaining of a livelihood. Weakness is misery, and ignorance of the facts and forces underlying human activities is followed by failure and discontent. Quantitatively, very few of the facts constituting the world's knowledge can be learned during the brief period in school; the most,

therefore, that can be done is to give the pupil the power of self-help—to enable him to help himself to the accumulated experience of the race. Life as existing at the present time demands of the young graduate entering it that he be able-bodied, quick in adaptation to changing conditions, and willing to take hold of the first useful employment that comes to his hand. He must possess a love for labor and find his chief enjoyment in overcoming the difficulties of his daily occupation. He must be ambitious, upright, and honorable. Confident of his own powers, but modest in exhibiting them in the presence of superiors, he must possess high ideals of life and its possibilities, and be absolutely free from those vulgar and vicious habits so common in our modern youth. He must learn to love his work for its own sake, and not to drag heartlessly thru a daily routine as a means of gratifying some vapid social longing as his only relief from the slavery of his condition. The young graduate seeking employment must possess a mind tutored to close application, with a sympathetic grasp upon the physical problems and the material achievements that characterize this age. He must be one with the throbbing, living forces that he will encounter on every hand. He must be able to think in terms of dynamic as well as social forces. This is not all. He must be able to answer the question, "What can you do?" as well as the question, "What do you know?" He will find that the demand is not so much for a *savant* to solve the labor question as for a boy who can furnish some of the labor and who can improve upon its methods and upon its spirit. He will also speedily discover that the miserable smattering of three or four languages is not so much in demand as a facile possession of his own English, and that to express himself with brevity, clearness, terseness, correctness, and without mistakes in spelling or punctuation is indispensable both in securing employment and in holding it. Furthermore, he will discover that to be able to execute with neatness and dispatch the plans of his employer is more acceptable than advice on how the "old man's" business should be run. He will find that it is not his diploma and his Greek fraternity pin, but his all-round usefulness that is competent to secure a "pull" with his employer.

It is our object here to inquire to what degree our high schools are providing for the youth of this country the qualifications named in the foregoing outline. It should, of course, be remembered at the outset that no school, however well-appointed and wisely managed, can make him or her able to overcome the incapacity of hereditary weakness and the ban of natural incapacity. In this consideration of the course of study natural ability and preliminary preparation are presupposed.

The whole process of education may be embodied in the words "thought" and the "expression of thought;" and these should correlate at every step. The material provided for thought should be that which most characterizes this age—that which will put the pupil into sympathetic relations

with the life he must live and with the work he must do. Natural science, as taught in our best high schools, furnishes a fruitful field for thought, and the facts it deals with are close to the daily requirements of life. The habit of reasoning from cause to effect is a necessary qualification for the citizenship as well as for the pursuit of a trade or profession. All the sophistry and clap-trap of the politician is made possible by the almost universal absence of correct notions of cause and effect on the part of the average voter. Could every boy in our high schools receive the proper training in science, and have incorporated into his mental and moral fiber a love for truth, as well as an appreciation of cause and effect, a belief that there is any particular relation between "good times" and the prevailing political administration would become obsolete, and many a demagog would turn his attention to the question of how he could become really useful and productive, and away from his ridiculous claims as a benefactor. There is not enough science training of the right sort in our high schools. Our graduates, taking them as a whole, are not imbued with the true scientific spirit at all, chiefly because the school administrations subordinate the useful and practical to the theoretical and ornamental.

Physiology, which is usually taught from the text-book in the most superficial and perfunctory manner, should take its rank as a laboratory science, and should be so thoroly treated, both from the standpoint of physiology and hygiene, that the laws underlying physical well-being would be thoroly instilled into the minds of the pupils. Much of the failure in life comes from ignorance of the laws of physical being. The teaching of science has only recently approached a scientific and practical basis, but from the improved methods now in vogue, and the rapid improvement in the qualification of teachers, there is much to be hoped for in the near future.

Excellent as is experimental science in its power to set the student in working order, it is not sufficient. Activity is the law of youthful growth. A certain reflex action between brain and hand is essential to normal growth. The full and complete realization of the laws of dynamics and of the properties of matter which comes to a boy in the workshop when executing a piece of work systematically is fully as essential as the abstract principle which too often exists in the mind as a shadowy impression held just long enough to pass the examination. The application of science is seldom seen by a boy whose experience is limited to the laboratory and the class-room. In order that a boy may be fitted for life thru the study of physics, he must be made to see the vital relation of its laws to the common mechanic, and how an accurate knowledge of it has advanced civilization thru the industries of life. But our high schools, except in isolated cases, do not provide this hand-training; and here — let me express my sincere belief — is the great weakness of the

high school of the present. The objects of manual training in schools are twofold: first, to stimulate and nourish the growth of faculty, and, second, to place the pupil into correct relations with labor. The first object alone would fully justify its introduction from a purely educational basis. I am fully prepared to state, and to prove from observation and experience, that a pupil can and does do as much and better academic work in four years with an incorporated course of manual training and drawing as he can without such training. The second object is paramount. Correct relations to industry involve: love of labor, a knowledge of its difficulties and of the cause of the laborer, his weakness, his trials, and the causes which lead to his complaints and his strikes. The discussion of the labor question in political-economy classes by youths who are too lazy to work and too ignorant and helpless to be of the slightest practical service is a travesty on public education. It is important that the youth in his preparation for life learn to think, but it is vastly more important that he learn to work. I cannot but express a fear that our high schools are not fulfilling this function. It will be found on close investigation that the most of them are cramming for examination with the diploma as the goal, that many pupils are attending school for social ends, and that their training is tending toward politics, socialism, and militarism, instead of industry, individualism, and peace. This is plainly seen in the literary school society, which is a sort of semi-secret dilettantism, and inculcates a spirit of snobbishness and caste; it is also seen in the Greek-letter fraternities, those juvenile hotbeds of selfish love, self-seeking, and politics. The tendency in too many high schools is toward the non-producing professions and away from the productive industries — toward the making of statesmen instead of the building of states. The sympathies of the youth are being directed toward the arts of war instead of toward the arts of peace, how to make trouble instead of how to prevent it. Our histories treat principally of war and politics, instead of those activities which foster peace and prosperity. The tendency is toward selfishness, non-productiveness, caste, militarism, socialism, politics, laziness, and consequent *ennui* and misery; as against broad-minded generosity, both individual and national, industrial productiveness, catholicity, individuality, domesticity, industry, and consequent mental and moral buoyancy and happiness. This condition is also fostered by an undue amount of time given to militant, political, and selfish Romanism, as imbibed thru a protracted four-years' study of Latin. Julius Cæsar is a colossal historical character, but he can hardly be chosen as a model for nineteenth-century American citizenship.

But here I must again remind you that your acceptance of these views on the preparation of our youth for citizenship will depend wholly on your ideal of life. If you hold the French ideal, that life means political preferment and dependence or a barnacle existence in army barracks;

that preparation for life is skill in sharp-practice schemes to "live by one's wits" instead of by industry; that the function of the citizen is administrative and militant instead of productive and industrial—then these words will have little weight with you. If the qualities attributed to us as a part of the Anglo-Saxon race by Edmond Demolins in his famous book on *Anglo-Saxon Superiority* actually existed to the extent that he assumes, an affirmative answer to the question, "Are our high schools preparing for life," would be speedy and decisive; but unfortunately the qualities and practices which he so graphically portrays of the schools in France are also to a considerable degree descriptive of ours. The beautiful picture which Demolins paints of English schools is the exception, not the rule, in the United States of America.

Mathematics should, and doubtless does, stand as an important thought-study in our high schools. The effect of mathematical study on the after-life of the pupil depends on how it is taught and learned. Where it is taught as a means of thought-expression—as a means of physical measurement—it will take hold of the pupil and form a component of his mental constitution; but where it is taught as an abstract means of mental discipline, without application, it is of little value except as a stepping-stone in the scramble for "points." Abstract mathematics is much like abstract eating. To be of constitutional value it must answer to an appetite for it to supply an actual need, and this need will be seen and felt by the pupil in a school in which the things and forces to be measured in laboratory and workshop form a part of his daily experience.

The value of history as a thought-study depends on the facts selected and the method and spirit of presenting them. Those of our schools which teach biography of men selected from various walks of life, industrial and philanthropic as well as military and political, weaving about them the necessary facts of contemporary history, are doing something toward the making of good citizens. It is important that our boys and girls be smart and able to take care of themselves in debate, but it is imperative that they be honest, moral, truthful, and upright. The human interest furnished by the lives of worthy men and women in all walks of life makes biography a potent means of study for the preparation for life.

One of the most important of the studies in high schools, and at the same time the one receiving the most anomalous treatment, is that of English. The correct and ready use of the mother-tongue in written and spoken language is the most important factor as a preparation for life. Thru English is furnished the means of all thought-expression. The thought furnished by science, manual training, history, etc., should find its expression in English. It must here be confessed that the average high-school graduate is not able to express even the few thoughts he has in anything but clumsy and inaccurate English. This is chiefly because the

study of English is usually pursued, like mathematics, as an end in itself instead of as a means to express thought, and because it has not been properly correlated in the course of study. The chief work thruout the entire course should be the writing of short daily essays on the work the pupils are doing in the other departments of the school. Pupils are too often sent out on a wild-goose chase for material for an essay instead of requiring of them a direct and simple expression of what they are doing and thinking from day to day. Teachers should be given an extra period each day in which to visit other departments of the school for the purpose of familiarizing themselves with the work their pupils are doing—for the purpose of finding appropriate subjects for pupils to write upon. Pupils must learn the language from use as well as from theory, if they ever learn it at all.

There is altogether too much study of foreign languages in our high schools to make them the best agencies as a preparation for life. I am not here assailing them on their educational value *per se*, but only on their occupancy of time which should be given to the mother-tongue; and it is only in the assistance which foreign-language study gives to a better understanding of English that they have any right to a place in the curriculum at all. I am, of course, ready to admit that a perfect understanding of English or of any other language, considered from an etymological or historical standpoint, would require an exhaustive study of all languages, but this cannot be undertaken in four years. The question is: "What can be done for English in four years?" It seems to me that if the time in three of the four years usually put on Latin were put on English composition and criticism, the pupil would come out with a better mastery of his mother-tongue. One year of Latin would, if rightly presented, furnish the pupil all he really needs as an assistant to his own language. The advantage of the knowledge of certain roots, both of Greek and Latin, can be secured to a considerable degree without taking an extensive classical course. As says Bain in his *Education as a Science:* "The roots actually employed in the language are separated and presented apart, and their derivatives set forth; and we are thus taught exactly that portion of the Latin and Greek vocabulary that serves the end in view."

It will be inferred, then, from the foregoing, that while our high schools, as they now exist, without the proper correlated training in science, manual training, and English, do turn out boys and girls able to pass certain examinations, to pursue courses leading to professions, and to secure certain office and commercial clerkships, they are not preparing the youth of this country with that all-round, symmetrical development—practical as well as theoretical—which is commensurate with the money expended upon them.

Do our high schools prepare our boys and girls for college? The

fact that thousands of high-school graduates are admitted to colleges each year seems to answer the question affirmatively. Most high schools furnish two courses—one leading to entrance to college, and the other leaving out the time-honored requirements, a quantum of this or that. It has always seemed to me a curious travesty on American education that a certain training is considered necessary for entrance to college, while a different training is considered necessary as a preparation for life. The best preparation for life which a high school can give is to put the pupil into full possession of his best thinking and executive powers, and to inculcate habits of industry and perseverance, while implanting in him an honest, candid sincerity of purpose. Now, it seems to me that something must be wrong with a college that requires a different preparation. If it is the function of the high school to prepare its students for life, then it is the function of the college simply to extend that preparation, making it fuller and more complete. If the high school adds to the pupil's chances for happiness and success in life, then the aim of a college should be to increase these chances. It is an encouraging sign of the times that our better colleges are diminishing the number of "protected industries"—those industries which require a student who wishes to pursue a certain line of work to spend a number of years at something else. It should no longer be necessary to pay tribute to Greek and Latin in order to matriculate in the A.B. course. A thoro mastery of and facility in the common uses of English is a better preparation for the higher pursuit of the arts than is that which is usually insisted upon.

It may be questioned whether our high schools are really preparing their students for college in the fullest and best sense. I have tried to show that the preparation for life is not so adequate as could be wished. The same is probably true with the preparation for college. The world receives the boys and girls as they are, not because they are fully prepared to assume life's duties, but because it is the only material furnished, the final result in life's successes being lowered. So it is with college; our high-school graduates are received there, not because they have the best preparation for entering upon advanced work, but because they are the only material which is available. The causes which have led to these imperfect conditions—conditions which make it possible for a boy to pass thru the high school and on thru the college and come out without any of the true elements of an education—are complex and beyond the scope and purpose of this paper; but a bare and brief enumeration of the more potent causes would include (1) a popular demand for the ornamental in preference to the useful; (2) the fictitious college requirements of quantitative prescription instead of power to pursue higher work; (3) the assumption on the part of parents and teachers that the average boy and girl have sufficient native ability to take the course which our higher schools prescribe.

In conclusion, let me state that the view here taken need not be considered pessimistic. I believe that, under all the conditions incident to the present stage of our educational evolution, the outlook is most encouraging, and I only wish to emphasize that, while the prospect for the future is bright, we need to guard ourselves against any self-complaisant belief that we have reached the best which the wealth of our present opportunities affords.

DISCUSSION

Dr. A. F. Nightingale, of Chicago, Ill., made vigorous protest against many of the points of the paper. He did not believe that the high schools of the country are as unworthy as represented. If the high schools are preparing neither for college nor for life, they must be preparing for destruction and death, and the speaker considered such an idea altogether false. At the present time the greatest weakness in the public schools is in the grammar grades, but it is not for high-school teachers to spend their time criticising them. The speaker did not believe that an interest in science and manual training makes it necessary to condemn the foreign languages and Latin. There should be no teaching for examinations. The word "examination" should be blotted out of the language of the schools. Teachers who are working with pupils thru the whole year know whether they should receive promotion or not.

Principal William H. Lynch of Mountain Grove Academy, Missouri, considered the study of Latin as essential as grammar itself. He claimed that the high schools do prepare for college and for life.

Principal O. S. Westcott, of Chicago, protested against condemning other studies in the interest of manual training. The man who teaches in a manual-training school does not use any better English than his fellow from the literary school. To train apprentices is not the work of the public schools.

Superintendent L. E. Wolfe, of Kansas City, Kan., defended the paper. Education has become more and more concrete. Scholasticism has been outgrown. Once we studied about science; now we come in contact with actual material.

Principal W. H. Housh, of Los Angeles, Cal., spoke for California. The West looks to the East for inspiration in educational matters, but in this paper he thought there was a strong bias toward one line of work. As a teacher of science in Los Angeles, he had found that the best work was done by pupils who had taken the classical course.

Principal Morrison, in closing the discussion, claimed that it was the business of the department not to praise the high schools, but to discover and point out their defects, to the end of ultimate improvement. It is not claimed in the paper that our high schools are not preparing for life, only that they are not preparing for it in the fullest and best sense. It is our business as teachers not so much to admire our work as to improve it. In order to improve it, we must point out its defects.

SHOULD ARITHMETIC, ENGLISH GRAMMAR, GEOGRAPHY, AND THE HISTORY OF THE UNITED STATES BE REVIEWED IN THE HIGH SCHOOL?

BY J. W. CRABTREE, INSPECTOR OF NEBRASKA HIGH SCHOOLS, LINCOLN, NEB.

The modern high school is the popular secondary school of America, taking upon itself all the functions of both the public school and the academy. In its first years of development its purpose was to add a few higher branches to the knowledge of pupils who had spent the required time in the lower grades. There was no thought of the high school preparing for college until in the sixties. Since then it has had a most rapid growth and expansion. Once intrusted with the work of secondary instruction, it has rapidly outstripped academies and private schools.

We started out with the idea that the work of the public school was to give instruction in the common-school branches only. Men raised their hands in horror when it was first suggested that higher education should be offered at public expense. But our public-school system has had an expansion the like of which the world has never before seen. Where the system has had the fullest development, it now includes the whole range of instruction, beginning with the primary grades in the city and country schools, and ending with the highest graduate work of a great university.

The extension of the system to include college and university work not only changes the nature of the university, but it modifies all the work below. It does away with the break between the lower grades and the high school, and fills the gap between the high school and the university. It gives a *continuous* school, without those unnatural divisions of the old system. Under this system subjects difficult of mastery may be placed farther along in the course and the easier ones pushed farther down toward the elementary school.

As a part of this great public-school system, the high school, besides giving the pupil such a training as will enable him to enter college and pursue his college course successfully, gives the best preparation for life. It stimulates mental activity and affords educational growth itself. It has vocational aims, social aims, and culture aims. It fits for college, but it fits for society as well. It does not attempt to teach each vocation, but it acquaints the pupil with the meaning and importance of a vocation, giving a general preparation for life, with only the underlying principles of a specific vocation. In the small town it will combine in one course, so far as possible, that which will give a training in the mechanical and industrial, commercial and intellectual, affairs of the world — a training which the new university will accept for entrance requirements as readily

as a preparation in an academy. In the larger cities, the course, as it advances, will branch out along these lines, giving still further advantages to pupils. But in all the courses in all the towns certain essential branches will be thoroly mastered. In such high schools, should arithmetic, grammar, geography, and history be reviewed?

No argument need be presented to show their importance. They belong to that group of essential subjects needed by all. The farmer, the merchant, the professional man, the student, all attach the greatest importance to a thoro mastery of these branches.

The question, then, resolves itself into this: When pupils enter the ninth grade, is their knowledge of arithmetic, grammar, geography, and history sufficient? Is such a review needed?

Pupils entering the high school at the age of fourteen and under, if they have been well taught, are ready to take up elementary high-school subjects, but their immaturity prevents their having a thoro knowledge of arithmetic, grammar, geography, and history. At that age they do well to have a working knowledge of the grammar-grade branches; that is, such a knowledge as will enable them to begin algebra, Latin, English, etc. A better grasp of these subjects must come later. It must come after the pupils have advanced, not only in years, but in their studies. Their knowledge of the common branches will be broadened and extended somewhat in connection with certain high-school subjects, but besides this they should have a thoro review, especially in arithmetic and grammar in the latter part of the course.

There is a knowledge of these branches that no immature mind can grasp. Nothing would be gained by giving the review in the first and second years of the high school. It would merely be a repetition of the work of the grammar grades, without much, if any, improvement therein. A half year of good, thoro work on these branches in the eleventh or twelfth year is worth two years on the same at the beginning of the high school. Whether the question is viewed from the university or high-school standpoint, the answer must be the same. Whether the student is to continue in school or to step out, no school work is more valuable to him than a knowledge of these common-school branches.

The possible objection to a review is the lack of interest in some schools where this work is attempted. I have observed a lack of interest in the common branches in many schools where they are taught in the ninth year, and in some where they are taught in the twelfth year. There are good reasons for the lack of interest in the ninth grade, but I see no reason for it in the twelfth. In the twelfth I would hold the manner of presenting the review responsible for any lack of interest. As a rule, the trouble may be traced to the teacher. Unless the teacher carries the same enthusiasm into this work that is taken into other high-school classes, the students will not be interested. As a matter of fact,

many high-school teachers who attempt to do this work have never mastered these subjects themselves. Observation will show a larger number belonging to this class than would be expected.

An investigation in my own state shows that the graduates of schools where these subjects are emphasized in the last year of the course seldom fail to pass the examinations for teachers' certificates, while in schools where the review is not offered, or where it is offered in the ninth or tenth grade, a large per cent. of the candidates for certificates fail to pass. In theory country teachers should have professional preparation, but in practice high-school graduates without further preparation do the teaching.

There has been such a demand for professional training in the high school that many of the larger cities have established normal courses. Every high school *should at least give a thoro knowledge of the common branches*, and this can only be done in the last part of the course.

In order to get a consensus of opinion, the following questions were sent to the principals of seventy of the leading high schools of the United States:

1. When your pupils enter the ninth grade, is their knowledge of grammar, arithmetic, geography, and history sufficient?
2. Do you consider it advisable to review these branches in the high school?
3. If so, in what year would you give the review?
4. What is the nature of the review in your own high school?
5. How much time is spent on each of the subjects?

Out of the sixty-one replies, fifty-six say that their classes on entering the high school have not had a sufficient mastery of these branches. The other five believe that their classes have a sufficient knowledge, three, however adding that normal classes should have further work, especially in arithmetic and grammar.

In answer to the second question, "Do you consider it advisable to review these branches in the high school?" forty-two say "yes;" fourteen do not favor a review, but simply additional technical work in each branch. Those favoring the review would have it include additional work also.

Fifty-two would have the review the last year of the high-school course, while four would continue these subjects in the ninth grade.

Thirty-four of these high schools have the review in some form. Seven others will begin next year.

These reports, representing the leading high schools of the United States, may be taken as the average opinion of our most progressive educators on this question. The opinion, it will be noticed, is clearly from the high-school standpoint.

As to the amount of time and attention to be given to the review, the

reports differ widely. A few would devote most of the twelfth year, while a number would use only a few weeks for each subject. The tendency is evidently toward the review, together with additional work in each of the essential common-school branches.

A great many principals express views similar to the following, which comes from Des Moines, Ia.:

> My opinion is that a review of arithmetic, grammar, geography, and history of from six to twelve weeks during the last year of the high-school course is desirable, and especially so for those who expect to engage in the work of teaching without further preparation. I would place the review late in the course, because the more mature the pupils, the more they would be able to appreciate the principles involved in the subjects named.

Several mention the fact that the review has been forced upon the high school on account of the large number of high-school graduates who engage in teaching immediately upon finishing the high-school course.

I also collected matter from city superintendents and found their views to be about the same as those of the high-school principals. Superintendent J. M. Greenwood, of Kansas City, expresses the average conservative opinion when he says:

> I am of the opinion that the English teaching in the high school should continually dip into English grammar; that history and civics should dip into geography; and that arithmetic and algebra should form one subject. No intelligent teacher of algebra will fail to connect algebraic work, wherever possible, with the arithmetical by pointing out the expansion of the lower into the higher.
>
> Aside from what I have indicated, the latter part of the twelfth year the graduating class should *at least have a terrific drill in faulty English.*

Several of the states have encouraged a further study of the common-school branches by offering state aid to such high schools as have a proper review of these subjects in the junior and senior years. Minnesota is an example. Inspector Aiton, of that state, writes as follows:

> Five years ago we decided to recognize what, for want of a better name, we call "the senior common branches." As the name indicates, they are to be offered in the senior year of the high school. It is not an ordinary review, but a study of the fundamental principles of each. I do not think they should be accepted for entrance to college, but they are certainly contributing to a noticeable revival of interest in the common branches in our state.

There are two ways of arranging the reviews: the work (1) to occupy so many weeks at the end of the senior year; (2) to extend thru the year, occupying one hour each day. It does not matter so much whether it is bunched at the last of the year or strung out thru the course, but *it is important to give the review.* It is important from every standpoint. No work in the high school is of more practical value or of more culture value.

The nature of the review will depend upon the work done in the

grammar grades, upon the attention given in connecting high-school subjects with the elementary subjects, and to some extent upon local conditions.

If arithmetic has been well taught in the grades and emphasized in connection with algebra, less time will be required to master it, and the work need not be so elementary in character. It should then consist of a rapid review of the essential divisions of the subject, together with an analysis of practical problems and a discussion of the principles involved in the various operations. As a rule, six or eight weeks, with one recitation a day, would afford ample time for this subject.

Besides teaching geography in connection with history, literature, and science, it should have a place in the high school in the nature of physical geography, or physiography, and better than other subjects it could be placed before the senior year, if necessary.

Where classes on entering the high school are unable to take hold of the first work in Latin, they should have a drill at once in English to enable them to pursue the Latin work with credit, but no more than this until later. If the grammar work in the grades is well done, a drill in the ninth year will not be necessary. The principles of grammar will be brought out in the study of Latin, in rhetoric, and in literature also. Then, near the last of the course devote several weeks to a thoro review, getting down to bed-rock principles, closing with Superintendent Greenwood's "terrific drill in faulty English."

The work in history should not be so much in the nature of a review as a further study of the problems of history, using the sources. A term or more intensive work in American history can be given profitably in the twelfth year. The study of special topics, using a text similar to the one just from the press, the *New Source Book*, by Dr. Hart, of Harvard University, or better, Mrs. Sheldon's history, or the work prepared by Professor H. W. Caldwell, of Nebraska University, would not only give a needed review, but it would give the student a new and deeper meaning for history.

Letters from six university presidents favor attention to these subjects in the high school. The following from President James H. Canfield, late of the University of Ohio, will be of interest to those who desire to know the attitude of the state universities on this question. Permit me to use this letter as a summary for this paper:

> I think arithmetic, grammar, geography, and history should be reviewed rapidly in the high school — if possible in the last year, and if not then, as near the last of the course as possible.
>
> I regard this as exceedingly essential, (1) in order to fix fundamental principles in the minds of those who are going out from the high school and will possibly receive no further instruction; (2) in order to give all high-school graduates a connected view of the entire field of each of these subjects; (3) in order to prepare those who expect to teach for the usual elementary examination.

IN FUNDAMENTAL CIVICS, WHAT SHALL WE TEACH AS THE AMERICAN DOCTRINE OF RELIGION AND THE STATE?

BY PRESIDENT SYLVESTER F. SCOVEL, UNIVERSITY OF WOOSTER, OHIO

In the education of its children and youth society finds its most sacred trust, its greatest opportunity, and its severest test.

What is true of society is *a fortiori* true of those to whose special agency society intrusts so largely its educational function. Our responsibility is undeniable and grave. It is proportioned quantitatively to the 21,082,000 of our school population, and qualitatively to much more. For we have under our care the finest youth of all the world (when taken collectively); and we have them under the conditions of that amazing prodigality with which public and private means are furnishing us the best facilities for our work, and the equally amazing confidence with which our people intrust their means and their children to our use and care, joined to the liberal extension of the preparatory period of life, and the heartfelt anxiety with which home and church and state await the results of our work. The greatest question about our whole task, so conditioned, is its inner meaning and final end, and how that end may be secured. We shall miserably fail in the use of our splendid opportunities if we miss our way at this point.

We approach the central point in the inquiry of our theme.

The teaching of civics has obtained a marked development in recent years, beginning with the close of the war to subdue rebellion. It has been discerned that training for citizenship is an indispensable constituent in an education which will fit men and women for life under our free institutions and in our times. Everything serves to quicken this tendency. It is increasing, and must increase. The propriety of it is as evident as the fact. Society and government and the public welfare demand more of this work, and better. Here again it is both desire and duty to inquire for truths and principles, as well as proportions and methods. And they must be of real and lasting interest in proportion as they are fundamental.

There can be no question as to the fundamental character of our inquiry after the American doctrine of religion and the state. Religion as a social force is now fully acknowledged by all who can be claimed as authority. Writers on sociology must deal with it for today, as every historian deals with it for yesterday as the maker of today. And religion has made, and must make, great impressions in connection with political thought. It has had so much to do in making the world as it exists today that there can be nothing of greater interest to us, as teachers both of

what has been and of what ought to be, than to know the right relations of religion and the state.

Fundamental civics must include, at least, instruction concerning these four things: the true nature of the state; the rights it establishes; the duties it may demand; with its relations to other great forces and organs of society, and to other states. Here we must discover that religion touches the whole territory and has something to say concerning each of these radically important matters.

Especially does this seem to be true for us, if there is a distinctively American doctrine—which may be traced alike in our earlier and later history, and must be taught as we teach that history; which has been observed by shrewd students of our institutions from without, and acknowledged by masters of their philosophy from within; a doctrine which is not only itself to be taught, but which provides a sound and satisfactory basis for teaching a system of morals in our whole public education which shall be in thoro accord with itself, and shall be taught upon the same basis of effective sanction which it claims for itself; and which doctrine, and the education it has authorized and created, shall be found abreast of education's highest ideals, and hopefully adequate to the demands of our country and to the exigencies of our times.

Our task in outline would be, if time allowed:

I. To sustain the assertion that there is an American doctrine of religion and the state, which is plain and clear enough to be taught in fundamental civics.

II. To show that this doctrine provides a firm basis for the teaching in all our schools of a satisfactory system of Christian morals, on a solid basis of Christian sanction.

III. Then should follow the effort to make it appear that this doctrine and the education it authorized and created are abreast of education's highest ideals, and are hopefully adequate to the demands of our country and the exigencies.

I must omit from the present discussion both the second and third departments, and confine what may be said under the first to suggestions such as may lead the earnest-hearted teachers (whose attention I hope to gain for the theme's sake) to pursue elsewhere further inquiry and investigation.

I. In beginning the definition and distinction of the American doctrine of religion and the state, we make this first assertion concerning its content:

1. It holds firmly the moral nature of the state. The moral nature of the state and the moral nature of man are bound indissolubly together. It is impossible to constitute a non-moral state out of positively moral constituents. Moral nature in man is essential, and it cannot, therefore, be accidental in the state. Freeman says: "That a nation in its public

dealings should be guided by the same general principles of moral conduct by which an individual is, or ought to be, guided in his private conduct, is a truth which seems *involved in the very conception of national being*." This is the American doctrine, not because any act of Congress ever said so in terms, or courts ever decided so in words, but because common-sense (with no nonsense of realism or refinement of speculation) decides that when men who are moral agents unite for government, according to necessities implanted in their nature by their Creator, and for distinctively moral ends, they do, in the collective body so formed, come under moral responsibility which necessitates a clearly moral nature in the body politic.

2. The moral state has a right and a duty in selecting the morality it must adopt and the sanctions which will make these morals effective and supreme. It finds both in the nature and will of God. (This is the familiar truth of history, as even Plutarch shows.)

3. The state, now become religious for itself and its own purposes, that it may accomplish its moral mission, must not legislate anything contrary to the moral precepts which God makes known, and must make these precepts obligatory only so far as they concern overt acts — because this is the limit of its commission.

4. The state, now religious for itself, is under bonds to carry out justice to the utmost attainable boundary, in its administration, because its laws are founded upon and are representative of the justice of God.

5. The state, religious for itself, may of right and ought to employ all its educational appliances and facilities toward the preparation of its citizens for the exercise of every virtue demanded in its laws and in the life they define and establish, thus providing for the minimum of physical restraint by providing the maximun of moral impulse (i. e., developing the human in them to minimize and then subsidize the animal — a course of conduct for the suggestion of which we are *not* indebted to the ethics of evolution).

6. At the same time the state, religious for itself, may and must grant fullest liberty of conscience in all matters of opinion, since the divine law has charged it only with superintendence of action. The just limits of religion in the state embrace toleration of different sects, no penalty or disability on account of religious preferences, no tithings or church rates, no compulsory legislation concerning the spiritual interests of men as distinguished from their moral interests and conduct. All this forbids utterly any connection between church and state. Both these institutions are divine, and therefore it is evident that they must cover different domains. They may co-operate, but may never coalesce.

7. It must now be added that this state, religious for itself, must be such at the free choice of its constituent citizens. The idea of a religion forced upon a people is more repulsive than their being compelled to

submit to a form of government they do not choose. There must be no dictation to the people in this matter from any source whatever. As there must be no interference with the indefeasible right of a nation to be religious, there must be no interference with the form of religion which it may assume. The adopted religion must be no political fiction held for effect. An honest clinging to God is the only one which God can accept, and the only one a nation can render without utter and final demoralization.

To recapitulate: This doctrine is that of a state, religious for and of itself, holding (1) the state to be supremely moral in its nature; (2) holding itself responsible to God for its moral legislation and moral life; (3) not willing to legislate against his precepts and confining its prohibitive legislation to overt acts; (4) acknowledging itself bound to execute justice to all men; (5) confessing its obligation to educate to a morality which is divine in its origin and sanctions; (6) commissioned to guarantee freedom of conscience as the most precious of human liberties; and (7) resting securely upon the genuine convictions of the popular heart.

That this is the American doctrine is clear from the fact that I have described substantially just the outline of our national life. Our origin was Christian, and origin is always vitality, and religion is even stronger than language (as Max Müller assures us). Church and state never existed as a national institution, and never at all in the center or in the great West. Ultramontanism was never hinted at. The commercial or purely secular theory of government was (happily) not yet discovered, so that we were born into this American idea of a state religious for itself. The whole world was ripe for such a birth, the type of future perfection, and it could not have come earlier or later. Our colonial experience and our national period are alike full proof of this general assertion. Remember the Declaration of Rights of the Continental Congress in 1774, Washington's orders, and the quadruple appeal to God in the Declaration of Independence. In this great document American institutions are stamped as at once Christian and free. Equality toward man and responsibility toward God are announced on the same page. The same thing is true of the great ordinance of 1787 for the Northwest Territory, and measurably true of the constitution, which is far from atheistic in the moral ends of government it seeks, in the acknowledgment of the sabbath and the Christian chronology, and in the sanction of the oath. Continuous legislation, federal and local, has borne unceasing witness to this doctrine. Christian rights of property; Christian laws of marriage; Christian oaths in all courts of justice; Christian laws against profanity; Christian prohibitions of lotteries and other temptations to vice; Christian provisions of chaplaincies for legislative bodies, for army and navy; Christian exemptions of the Bible from execution; Christian influences in prison life; Christian

policy in civilizing the Indians; Christian laws for sabbath defense, and special seasons of national worship; together with adherence to all this despite of much clamor and discussion—all, taken together, show that we have always been, are now, and always expect to remain, God helping us, a generously tolerant, but conscientiously decided Christian nation. We may take pride as well as pleasure in remembering that our country presents the first great commonwealth of the world's history in which religion has played so nearly its typical and proper part to our own great advantage and its own great prosperity. The state constitutions (save a very few) acknowledge God in terms. Christianity's spirit underlies our common law and leavens our common life and assimilates to the cardinal virtues of our origin the masses of those who come among us, and Christian organizations gain numerically upon our increasing population; and when occasion urges we come to the "God of our fathers" with trustful faith and loyal love, and determine again to obey his voice and keep his commandments. All the surface contradictions and opposite opinions and contentions are but eddies in a great stream. We are keeping right on, in the way our fathers began to go, and in a yet wider and deeper way, as a Christian nation. There is much to be done, but what has been done and is being done cannot be successfully denied by any and ought to be ignored by none. In our American doctrine we stand nearer an ideal relation between religion and the state than any nation under the sun. I wish the time permitted the comparison which would prove this claim. Out from this relation should come and must come yet more beneficent results than in the past. All depends upon our understanding and using aright our privileged position in this regard. We have given up church and state, rationally, voluntarily, and forever; but we have done this only to take fairer and faster hold upon religion, and to relieve it from incubus and to make it fruitful. The cutting away of a fallen spar is not smashing the compass. It would be *that* to sacrifice the religious features of our government and thus enthrone natural morals (if anybody can discover them) instead of Christian morals in our laws, and thus to destroy the firm foundation for an adequately Christian education. The acknowledgments of this American doctrine are many and of high character. Three classes of testimony may be cited:

1. Such foreign students of our institutions as Burke, De Tocqueville, Hoffmann, Père Hyacinthe, Castelar, Bryce, and Lieber (to be counted in this list, tho he wrought and lived among us).

2. The acknowledgments of our founders, such as Washington and Franklin, of whom the first warns us not to expect national blessings while we "disregard the eternal rules of order and right which heaven itself has ordained." With these semi-official declarations should be enumerated the numberless acts of early Congresses, the special

acknowledgments of 1861–65, and those which came from the nation's touched heart in 1876.

3. More important still would seem to be the decisions of courts and the opinions of jurists. It is an almost unbroken line from Justice Story's assertion that our laws recognize "the divine origin and truth" of Christianity, to the recent decision of Justice Brewer (1892). I regret I cannot wait even to quote enough of it to demonstrate its value, whether as history or as law. It ought to be in the hands of every school-teacher in the United States, and might well be pondered by some professors of social science. To commend it to lawyers, I add it is officially published in *United States Supreme Court Reports*, 143, p. 457. The line of testimony may be fittingly closed by referring to President Cleveland's significant words, when remonstrated with by someone for the evangelical tone of his Thanksgiving proclamation. He said: "I guess we are a Christian nation, and we shall have to face the music."

The ordinary objections to the view now advanced are (1) the occasionally divergent declarations and decisions; (2) an urging of the clause concerning a religious test, and the language of the First Amendment; and (3) a fear that liberty of conscience will in some mysterious way be affected. To which it is sufficient now to say that there is (1) not so much divergence of opinions and legislation about this as about many other important and virtually finally settled matters in our national life; (2) that the clause and amendment referred to are wholly consistent with this doctrine — in fact, part of it; (3) that liberty of conscience has never yet been transgressed, but always established whenever an apparent case of difficulty occurred.

What is far more to the purpose is to note the importance and value of our American doctrine and practice. It conforms to the best theory of the origin and authority of government; it goes along with the increasing testimonies to the power of religion as a social force; it is abreast of the high conception of the Christian nation as the tool of divine Providence in working out most beneficial results which can be reached by no other instrumentality whatever; it enables us to demand a highly moral life *from* every citizen *for* every citizen, and to stand at the immigration courts with the severe demand of five years of moral life proved to the satisfaction of the court. Our whole moral legislation is dependent logically upon our position as a Christian nation, because it is Christian morals which we legislate. No man has a right to do wrong in America because it's a free country, for its freedom is limited by its morals.

Our American doctrine of the Christian nation quickens our patriotism without exposing us to the fearful necessity of saying "my country, right or wrong," because it keeps our country *right all the time* in the main issues of its life. This doctrine gives us a reasonable paternalism

in government to take real care of those who need care, and a deep and true-hearted *fraternalism*—free from socialistic extravagances. The nation must steadily grow in likeness to its ideal as each generation comes to realize it. This is the way to obedience for conscience sake, and that is the moral power which is the very soul of the Christian state. Emerson exclaims: "The fire of fire, the soul of soul, the force of force is moral power."

The advantage of our national Christian position has been abundantly proven by the success of it. With the freest institutions of the world, and with the greatest temptations the world ever knew to materialism, amid political convulsions the most profound, along with an accumulation of wealth the most rapid and massive the world ever witnessed, together with the inpouring of an unprecedented immigration, much of which has been unsympathetic, we have kept our institutions both Christian and free. We are more free than we were at the beginning, and we are not less Christian.

The stability of our institutions is dependent upon our Christian character as a nation. Things *stand* when their foundations stand. De Tocqueville read this nation's heart when he wrote as follows: "I am certain that the Americans hold religion to be indispensable to the maintenance of republican institutions. This opinion is not peculiar to a class of citizens, or a party, but it belongs to the whole nation and to every rank of society." (*Din. A.*, I, p. 285.)

God in national life we know to be necessary to the very conception of liberty (thru the erection of the true individuality of the man made in God's image), and necessary as well to the realization of liberty (since he has been contending for it in all ages); necessary, also, to the definition of liberty (since its only clear restraint is the morality which God ordains); necessary, besides, to the transmission of liberty (since that is an affair of generations which can only be trained to be worthy of freedom by being trained in the fear of God and the love of man).

Only by our national religion do we have moral unity in legislation, thus making law the greatest of ethical teachers; and moral unity in education by one general and consistent system of what is to be taught; and the moral unity of conscientious submission to and patriotic support of the government. This is a line of unities, amid the mazes of our divergencies, which we cannot afford to lose or even to allow to waver. We know the morals which are included in the Christian doctrine of the state. They are neither "independent" nor "natural" nor an "evolution morality" founded upon perception of tribal advantage, nor an "eclectic" morality gathered from everywhere by everybody. No! The system we have been professing and largely practicing for so long, and which has had so much to do with our marvelous prosperity and stability, is a God-respecting, sabbath-keeping, parent-honoring, home-preserving,

life-reverencing, charity-teaching, violence-forbidding, truth-compelling, purity-demanding, oppression-destroying morality. It is clear as the blue skies in the depths of its content, and as powerful as the spring sunshine in evoking the best there is in human nature.

Without our national religious character we cannot hold fast our significant and wonderful past. Nor can we secure our justly to-be-expected national future if we lose this best of our early characteristics. The moral vitality in us is from that root, and it is moral vitality that conditions everything in the whole future of the race. Without it we cannot assimilate and convert to a like texture with the original body the millions who are coming to us and the millions to whom we are coming. We need all we have in the Christian features of our national institutions that we may become in yet fuller measure the Christian nation we have begun to be. The life that is in us is making its own organism, but every bit of that organism which has been realized is according to nature's law, essentially necessary to its further and final realization. Genesis and development cannot be separated. What else makes the long lines traced by Roman institutions and laws, English struggles for regulated liberty, and Switzerland's persevering stability? And what but the lack of this makes French history a series of chromotropes? We need our national religion that we may fulfill our national mission to show the world the pattern of institutions which are at once Christian and free. Grand mission, that! And no other nation under the sun has the requisites for it as we have.

Nor less plainly do we need our Christian national position when we look out upon the international complications in which we are becoming more and more involved. All there is good in the amelioration of war's horrors, or the prevention of war's frequency, or the improvement of the condition of aliens and noncombatants, or in provision for the independence of smaller nations and justice to the uncivilized, is by the world's united testimony referred to the Christian element in our civilization. Here there is a field of grandest opportunity, and into it we are making a noble entrance. But our place and power there will be more clearly than ever dependent upon the positiveness with which we may assert our responsibility as a Christian nation, and upon the consistency of our conduct therewith.

We must hold our religious position, because the attempt to be neutral is both illogical and irrational. Concealment of such a thing as national Christian character, where it really exists, is impossible. There are and will ever be questions of conduct and education and of law which will call into immediate prominence this element. Shall we decide these things as a nation should which as gladly owns the obligation to obey God as it thankfully acknowledges its indebtedness to his countless beneficence?

Here, then, we rest the case.

If we have sufficiently proved the existence of an American doctrine of religion and the state, and have correctly described its main content, and have shown the constancy and judicial character of its acknowledgment, and have exhibited something of its importance to the stability and growth of our institutions, to our normal development, and to our mission among the nations — then it follows that this doctrine ought to be taught in our schools with such care and efficiency that no American citizen could ever arrive at the exercise of citizenship ignorant of its true place and irreponsive to its directing force.

DISCUSSION

President James H. Baker, of Colorado, prefaced his discussion by stating that he believed the world to be a moral world, and that religion is the ultimate sanction of morality. Had he listened to the paper of President Scovel as a sermon, he would have agreed with its doctrine almost wholly. But as a scheme of public-school teaching, he thought too much importance was attached to the formal recognition of religion. It is not so important that God shall be recognized in the constitution and the laws as it is that he be recognized in the hearts of the people. Formal religious exercises are not so important as actual living influence upon character.

President Baker spoke at length upon the necessity of absolute freedom of conscience. He thought that thru the public schools we shall by and by get to a full realization of religion and Christianity. There is no hope, however, in formal, perfunctory, often soulless exercises called religious. But even a bad man desires that his child shall be taught to do right. There is a need of the spirit of altruism in the schools, a genuinely democratic spirit of sympathy and helpfulness for all classes. Growth in morality is an actual growth — free, joyous, and in all directions. All right work is ethical. A dead-head in society, like a parasite, must perish.

Superintendent J. F. Keating, of Pueblo, Colo., was called upon for a discussion of Mr. Mathews' paper. He indorsed the paper in its essentials, calling especial attention to the logical manner in which the subjects of high-school study had been treated with reference to their ethical content. He favored the introduction of economics into the high-school studies, and suggested reducing the amount of Latin as a means of making room. He feared the spirit of militarism developed in some of the high-school studies, and made a vigorous appeal that the doctrine of American schools shall be that of "hands off" to every foreign oppressor of a weak people, our own government being no exception.

President Scovel closed the discussion of the afternoon, protesting against the use of such terms as "cold," "formal," "soulless," as applied to exercises in religious schools.

President Baker disclaimed any intention to give offense, and stated that he had spoken entirely from his experience.

JOINT SESSION OF SECONDARY AND HIGHER DEPARTMENTS

PRESENTATION OF THE REPORT OF THE COMMITTEE ON COLLEGE ENTRANCE REQUIREMENTS

BY DR. A. F. NIGHTINGALE, OF CHICAGO, CHAIRMAN

Mr. President, Members of the Secondary Department and the Department of Higher Education of the National Educational Association:

The fruit of the labors for four years of your Committee on College-Entrance Requirements is before you. There is little I need to say, much that I should be pleased to say, in the discharge of the duty devolving upon me as chairman, in the presentation of this report.

The world-wide publicity given to the celebrated report of the Committee of Ten, the favorable comments thereon, and the new blood infused into the arteries of secondary education everywhere in this country in consequence, made the further consideration of the subject essential, to the end of a better articulation of the secondary schools and the colleges.

So rapid has been the progress of education since 1895, so logical and so sensible have been the changes of attitude toward this great question, that your committee has found it difficult to keep pace with the evolution of educational opinion, and your chairman expresses the belief that this report, however timely and needful it may seem today, will be considered but faint prophecy before another half decade shall have passed.

The wise athlete summons into action all his reserve force as he nears the end of the race; his blood flows with renewed vehemence, his nerves tingle with renewed strength, as his glistening eye fastens itself upon the goal. As we approach the end of a century that has been kaleidoscopic in its transitions, and the clock strikes the hour of another cycle, new thought, new energy, and the reserve wisdom of contemporary study are everywhere visible. The secondary schools of today are more and better, because richer in equipment and more rational in method, than the colleges of fifty years ago; and fifty years hence they will be in advance of the colleges of today, while higher education, whose concepts are now illy defined, will consist of individual research, professional investigation, and the solution of those life-problems which an infant civilization has not presumed to attack.

In the preparation of this report the committee has drawn from all sources; it has studied the problem in the light of more recent conclusions in England, France, and Germany; it has scanned the whole horizon of American education. The correspondence undertaken, the

statistics gathered, the papers written, the discussions of conferences, the contributions of the press, secular and educational, the reports of sub-committees, would fill tomes of books; but we have contented ourselves with a brief discussion of principles, and the claims of studies which should underlie and enter into the programs of secondary schools, as schools fostered by the state, for the good of the state, and at the same time as tributary to the colleges which are to conserve the interests of higher education, furnish opportunities for professional training and for individual research along special lines. The report is concise, conservative, conciliatory. Tho far from being utopian, it approaches the ideal. It assumes that the secondary schools are for the purpose of giving the best possible equipment for citizenship and for success in life, within the limits of a four-years' curriculum, so arranged that the influence of heredity and individual aptitudes shall be kept constantly in view. It assumes that the colleges will fix their own requirements of admission, but requirements that will not discourage worthy students nor compel a preparation which is contrary to their tastes and talents, but rather such as will encourage and enable them to build on foundations well laid. The report does not deal with fixed programs for all schools, nor for any school, nor with curricula for individual pupils, but rather with courses of study, their matter and method, and the quantity and quality of work to be done, the place for each study and the time to be consumed in its pursuit. In Latin, a well-defined course is given for four, five, and six years; in Greek, for three years; in French and German, courses are prepared in detail, named elementary, intermediate, and advanced, covering respectively for each, two years, three years, and four years. The first may be taken in addition to Latin and Greek, the second as a substitute for Greek, and the third independently of either or both ancient languages. English should be given a prominent position in all secondary schools, and pursued, whether as a preparation for college or not, four periods a week for four years. The mechanism of the language should not be neglected, its literature should be a constant study; there should be much practice in writing, and a taste for the best reading should be inculcated by a wise selection of books, graded and classified with the utmost care. To roam at large thru a library, to select books by their titles and not by their content, is not commended. In every school there should be a reference library supplemental to the texts in the program of studies, and, in addition, a small, well-selected, thoroly graded miscellaneous library of the choicest literature, secured in duplicate. Five copies each of two hundred such books are better than a thousand books, one copy each, carelessly selected. It is not the quantity but the quality of books that makes a good library. The report in this respect is in a very large measure in harmony with the most excellent work of the Joint Conference on English, and with its e cent promulgations, issued after this report had gone to press. Sixty of

the books recommended by it in an open list for home reading will be found in the volume before you. This is a striking and most happy coincidence, as the two bodies were not in communication with each other, nor was the membership in any respect duplicated. The report on English, therefore, should meet with universal recognition and adoption.

The committee recommends, and with all the force of its influence emphasizes the recommendation, that American history be given a place for one entire year in the program, and even in the curriculum of every secondary school, and preferably in the fourth year of the school. Courses in history are presented for from one to four years, with the understanding that the schools will adopt as many of them as their members, equipment, and teaching force will permit, and that the colleges will accept and give credit for as many as they may deem wise and just.

Strong and extended courses in mathematics are proposed. There was some difference of opinion in the committee as to the wisdom of requiring so much.

There is a widespread conviction in the public mind that a very large and respectable minority of pupils, especially girls, while intellectually well furnished by nature and attainment in other respects, are deficient in the mathematical faculty.

There is serious doubt with many whether solid geometry should be forced into every preparatory curriculum. The chairman sympathizes with this view, and hopes the colleges will give earnest heed to this question before they insist upon making anything a constant in preparatory mathematics beyond algebra and plane geometry.

The committee prepared courses or made suggestions concerning the study of the sciences in secondary schools. It recommends for the first year, physical geography; for the second year, biology; that is, botany and zoölogy, or botany, or zoölogy; for the third year, physics; and for the fourth year, chemistry. It was a matter of the most poignant regret that the committee appointed to co-operate with us by the Science Department of this association did not furnish us with as harmonious, elaborate, and satisfactory reports as those which came from other organizations on other subjects. The report on zoölogy came too late for our careful examination; that on physics is incomplete, by reason of a lack of harmony in the subcommittee as to matter and method. No reports were presented on geology, astronomy, or physiology, subjects which are considered worthy of a large place in secondary-school programs.

We suggest, therefore, the appointment of a special committee to survey the whole field of science teaching in the secondary schools, and to make a report as exhaustive, as suggestive, and as conclusive as those of the American Philological Association and the Modern Language Association of America, which reports ought to be in the study of every high-school teacher of language in the nation.

As one studies this report in detail, he will at once see that the program of studies here discussed is beyond what most schools, except in the large cities, can offer, and far beyond what any pupil can compass in four years. It is expected that schools will arrange their programs in accordance with their opportunities, as limited by the public funds at their disposal, by the equipment at their command, by the numbers of their pupils, and by the number and quality of their teachers; and that pupils will be allowed to arrange their curriculum as dictated by their tastes and talents and their plans for the future.

It is hoped that the courses of study laid down in this report, with the unanimous indorsement of the committee, will be adopted and used by all schools as national norms to the extent in which these studies are included in their programs. It is further hoped that all the colleges will accept toward satisfying the requirements for admission any unit of work, recommended in this report, when proof shall have been presented by certificate or examination that the work has been well done; and that they will also give credit for any unit of advanced work, and desist from the injustice of compelling a student to go over ground which he has already carefully surveyed. The committee limited the constants for all schools to a minimum, in order that full play may be given to both the secondary schools and the colleges—to the one in fixing their requirements for admission, and to the other in determining the requirements for graduation. We believe there will be no difference of opinion regarding the constants here presented, so far as they go. There are many principles enunciated in this report which those who follow me will doubtless discuss. I need not enlarge upon them. If there is one central thought in the report, it is that of eclecticism, of wide options in secondary schools and in the requirements for admission to college. The question of intrinsic and relative value of studies is not dwelt upon. The test of the value of a study resides more in the teacher and the pupil than in the study.

Physical conditions are determined largely by diet. While I am not at variance with the principles or the practice of Christian science, I realize that what I eat has a very close connection with the normal or abnormal action of my digestive, absorptive, and assimilative machinery. That which I relish is better for me than that for which my physical system by nature or acquirement has an abhorrence. Some people can eat only cereals, others only vegetables, while many flourish on roast beef and pastry. There are foods for everyone, that suit everyone, if he is wise and discreet enough to select them. It is much the same with the intellectual. The same mental diet is not equally adapted to all. What you should study that you may make the most of yourself, as determined by your endowments, the gifts of the Creator, is not perhaps what I should study for the same end. The percentage of loss in our secondary pupils

from year to year is lamentable. This loss is not wholly due to home conditions. The program of study has been much at fault. Pupils have been forced to pursue studies, and given up the pursuit without capture, in sheer discouragement. They have been compelled to bolt down food which has been nauseating, but not nourishing. Intellectual dyspepsia has been the result, and they have abandoned school because it did not meet the demands of their nature, it did not feed their appetite; and yet in later years many of these same pupils have come to the very front in the honorable callings of life. There has been a noticeable increase in the per cent. of students who remain in college to the end of a curriculum since electives were introduced into college programs. There may be the same desirable results in our secondary schools, when pupils, under interested and safe guidance, are given a large liberty of choice in the studies they may pursue. There is a niche for everyone of average intelligence to fill, but the misfits in life are deplorable in the extreme. The opportunities for success and usefulness are rich and varied. The teaching profession needs better-trained specialists; in the learned professions there is vacant room at the top; in the world of nature there is much to be discovered, in the laboratory of science much to be developed. The institutions of mankind await the touch of master-minds to reform them and adapt them to new eras, new modes of living, and new methods of thought. Our own government needs rejuvenation; our municipalities, reeking with rottenness, need revolutionizing. The whole moral sense of the public needs quickening. All these high ideals must be reached thru the instrumentality of education. The young people of the nation, then, must be furnished opportunities for such an education as their natural endowments seem to foreshadow will be of most value to them. We shall not have, then, so many physicians that ought to be farmers, so many lawyers that ought to be blacksmiths, so many preachers that ought to be peddlers, nor so many failures in business because of mistaken vocations.

Woe be to the one who crowds upon a young and innocent mind a study which, tho meat to the parent or teacher, may be poison to the pupil! Child study, mental aptitudes, individual trend, the eternal fitness of things should absorb our thought and demand our vigilance in the arrangement of a curriculum of study for every boy or girl who passes thru the secondary school and the college. The sky is streaked with the gray of a better dawn; the clouds of pedantry are passing away; individualism in education is the promise of a rational future.

On behalf of the committee appointed by your departments to study the question of college-entrance requirements, with gratitude for your patience in waiting four years for our conclusions, with acknowledgments to the hundreds who have given us valuable aid, and in the hope that this report will be received and studied in the same earnest and honest

spirit in which it has been prepared, I submit it, with the unanimous endorsement of the committee, for your consideration.

DISCUSSION

PRESIDENT JOSEPH SWAIN, Indiana University.—In opening this discussion, I wish to say with emphasis that the committee of which Dr. Nightingale is the honored chairman deserves much commendation for the four years of intelligent and painstaking service which it has performed for the schools of the United States. It has labored long and faithfully. It has its reward in the knowledge that its labors will be most helpful to the cause of education. The committee very wisely, as I think, recognizes that uniformity of college-entrance requirements as regards particular subjects is not only undesirable, but impossible. It does hope, however, to establish a collection of units which shall be practically equivalent, and out of which the requirements for entrance shall be selected, thus making national units which shall be understood thruout the limits of this association.

In order that we may have in mind its terminology, I quote the language of the committee:

> The committee, for itself, adopts a definite terminology which will be used during this discussion. Three distinct terms seem to be needed: first, program of studies, which includes all of the studies offered in a given school; second, curriculum, which means the group of studies, schematically arranged for any pupil or set of pupils; third, course of study, which means the quantity, quality, and method of work in any given subject of instruction.
>
> Thus the program of studies includes the curriculum, and may, indeed, furnish the material for the construction of an indefinite number of curriculums. The course of study is the unit or element from which both the program and the curriculum are constructed.

The committee has secured leading experts from all sections of this union to aid it in the formation of these units. The result of its investigation deserves the very careful consideration of this association, and warrants the members in giving their most cordial co-operation in trying this scheme in our respective institutions. Dr. Nightingale has intimated in the paper to which we have listened that he would leave the resolutions, stating the principles upon which the report is based, to be discussed by those who come after him. I shall discuss briefly two of these:

> 1. *Resolved*, That the principle of election be recognized in secondary schools.

This resolution is properly placed as a fundamental one. The committee does not undertake to say how much election there shall be in any given school. It simply recognizes election as an established fact, and leaves to each school the range of election. Absolute prescription is no longer feasible, and absolute freedom of selection on the part of the pupil is not encouraged. I have no quarrel with those who have already found the exact curriculum for the development of the child, but there are too many exact curricula, each having the same claim to command general confidence in any one. For myself, I am inclined to believe for the present that the high school can do most for the graduate of the elementary school by giving him as a curriculum a minimum amount of those subjects which are very generally regarded as proper subjects for his study, and are representative subjects in the several fields of human knowledge; leaving the rest of the course to be selected from a wide range of subjects, partly by the student, partly by the parents, and partly by the teacher. There may be an ideal curriculum for a particular child, but there is no one curriculum for all children. The idea that one student may receive the training best for him thru the study of one subject, and another student thru the study of another subject, is rapidly gaining ground. I am willing to accept thoro

work in any proper high-school subject which has been pursued for at least one year under competent instructors, with adequate equipment, as a part of the work for college-entrance requirement.

2. *Resolved*, That the teachers in the secondary school should be college graduates, or have the equivalent of a college education.

I believe it is certainly significant that the present committee, the chairman of which is a secondary-school man, should so strongly reinforce the declaration laid down by the Committee of Ten. The greatest need I believe to be teachers of larger and more accurate scholarship. Scholarship is not by any means the only requisite a high-school teacher should have, but no teacher can lead students to proper ends without mastery of the subject he is required to teach. It is too frequently the case that the knowledge which the teacher has of the subject he is trying to teach is limited to the narrow and partial view of some text-book. The opinion expressed in the resolution, that a teacher should be in scholarship at least four years in advance of the pupils he is trying to teach, is certainly sound. A grade- and common-school teacher should at least be a graduate of a high school. A high-school teacher should be a graduate or in scholarship equivalent to a graduate of a reputable college. I would go farther and say he should have a four-years' course in college in the subject he is expected to teach in the high school. For example, if he is a teacher of mathematics, he should have a four-years' course of thoro mathematical training in college. There is a large amount of misdirected energy in our schools today because of the failure of many of our teachers to grasp the essentials of the subjects which they are endeavoring to teach.

A teacher who is merely able to solve the problems in some text-book may get along; he may be able to convince the pupils that they are getting on satisfactorily; he may have superior skill in class management; he may have a wide knowledge of educational literature; but unless he is master of the subject he is trying to teach, there can be no adequate compensation for time and energy expended; for it is the blind leading the blind, and they are sure to fall in the ditch at last.

The committee well says:

> The time is past when a superficial knowledge of a variety of subjects, coupled with a knack for giving instruction and some administrative ability, can be considered sufficient qualifications for teaching in a high school. In many departments of study, work is now being done in these schools as advanced as that done in the first year of a college course, and there is no better reason in the high school than in the college for intrusting this work to the care of teachers who lack adequate special training for it.

PROFESSOR F. H. CLARK, Lowell High School, San Francisco, emphasized the point that the secondary schools have a field of education distinctly their own, and that the colleges must recognize this and accept what the high schools find to be their proper work.

PRINCIPAL E. W. COY, Hughes High School, Cincinnati, O., criticised the report as having made a requirement of at least one half-year's work in Greek and some work in Latin beyond what was now customary or desirable.

PRESIDENT JAMES H. BAKER of the University of Colorado, being called upon, expressed himself as in general sympathy with the report. He stated that he was a conservative in regard to the doctrine of the equivalents of studies, but thought that the committee had been successful in adopting the only plans under which an agreement among colleges was practicable. He thought that it is the duty of the schools to train men and women rather than professional men and women; even those who stand most strongly for freedom of election in practice actually do insist upon certain studies as essential.

PRINCIPAL H. L. BOLTWOOD of the Township High School, Evanston, Ill., criticised the report as being impracticable in certain points, notably in the recommendation that all high-school teachers should have college preparation, especially if the high-school course be extended to six years. He did not think that the pay would be sufficient to

secure college graduates for seventh- and eighth-year work. He commended the system of units presented in the report as the basis of college admission.

PRESIDENT WILLIAM H. BLACK of Missouri Valley College commended the report, especially for the careful distinction drawn between the principle of election, as defined in the report, and specialization, as ordinarily understood. Specialization, so-called, is one of the hobbies which we are in danger of overdoing. He commended the remark of President Baker that the schools should train men and women rather than professional men and women. Boys and girls in the high school are not then choosing professions.

PRESIDENT DAVID STARR JORDAN of Stanford University, California, said that colleges have done much mischief by putting requirements upon the secondary schools as to what they should teach. Secondary schools should give the pupils work upon which the world can build; the universities desire work upon which they can build. These demands are identical. The schools should teach what they can teach best; the only thing that the colleges should insist upon is thoroness. President Jordan related the experiences of the Stanford University faculty in trying to decide on a basis of admission to the university. After much trouble the "Stanford system" was brought about. According to this system, any twelve units admit a student, the only thing being demanded from all being training in English composition, and there being a further restriction that any science units offered must represent work actually performed in the laboratory for not less than a year. Even the English requirements he thought unnecessary, believing that the high schools would insist upon that anyway. The speaker expressed himself as not being able to find anything in the report with which he could disagree.

MR. SEELY, of Texas, continued the discussion of the report, speaking of the burdens of high schools in trying to connect with the varying requirements of colleges, and commending this effort to unite them.

DR. A. F. NIGHTINGALE closed the discussion. He regretted that more opposition had not been developed in the discussion; and gave fuller explanation of points in the report concerning which fault had been found.

REPORT OF THE COMMITTEE ON COLLEGE-ENTRANCE REQUIREMENTS

NATIONAL EDUCATIONAL ASSOCIATION

LOS ANGELES, CAL., July 13, 1899.

To the Department of Secondary Education and the Department of Higher Education of the National Educational Association:

The committee appointed by your honorable bodies in July, 1895, to study the question of college-entrance requirements has the honor to submit the following report.

A. F. NIGHTINGALE, *Chairman.*
WILLIAM H. SMILEY, *Secretary.*
GEORGE B. AITON.
J. REMSEN BISHOP.
JOHN T. BUCHANAN.
PAUL H. HANUS.
BURKE A. HINSDALE.
RAY GREENE HULING.
EDMUND J. JAMES.
WILLIAM CAREY JONES.
JAMES E. RUSSELL.
CHARLES H. THURBER.

PART I

To the Department of Secondary Education and the Department of Higher Education of the National Educational Association:

The committee appointed by your honorable bodies to study the question of college-entrance requirements, for the purpose of harmonizing the relations between the secondary schools and the colleges, to the end that the former may do their legitimate work, as the schools of the people, and at the same time furnish an adequate preparation to their pupils for more advanced study in the academic colleges and technical schools of the country, submits the following report:

HISTORICAL SKETCH

At the meeting of the Department of Secondary Education of the National Educational Association at Denver, in 1895, a paper was read by Professor William Carey Jones, of the University of California, on the subject, "What Action Ought to be Taken by Universities and Secondary Schools to Promote the Introduction of the Programs Recommended by the Committee of Ten?" Discussion of this paper led to the motion for the appointment of a committee to report a plan of action on the basis of Professor Jones' paper.

The committee presented the following report:

WHEREAS, The most pressing need for higher education in this country is a better understanding between the secondary schools and the colleges and universities in regard to requirements for admission; therefore

Resolved, That the Department of Secondary Education appoint a committee of five, of which the present president shall be one, and request the appointment of a similar committee by the Department of Higher Education, the two to compose a committee of conference, whose duty it shall be to report at the next annual meeting a plan for the accomplishment of this end, so urgently demanded by the interests of higher education.

This resolution was unanimously adopted, and the result communicated to the Department of Higher Education, from which the following reply was presently received:

Secretary Thurber.

DEAR SIR: The Department of Higher Education has arranged to have a committee appointed to co-operate with the Committee on Secondary Education in regard to requirements for admission into colleges and universities. Very truly,

JOSEPH SWAIN,
Secretary.

The president of the Department of Secondary Education announced the appointment of the following committee in accordance with the above action: William Carey Jones, Berkeley, Cal.; A. F. Nightingale, Chicago

Ill.; C. H. Thurber, Hamilton, N. Y.; J. R. Bishop, Cincinnati, O.; in addition to the president, W. H. Smiley, Denver, Colo.

President James H. Baker of the University of Colorado made the following nominations to represent the Department of Higher Education: Nicholas Murray Butler (an original member of the committee, who has been unable to participate in its deliberations), New York city; B. A. Hinsdale, Ann Arbor, Mich.; James E. Russell, Boulder, Colo.; John T. Buchanan, Kansas City, Mo., and Paul H. Hanus, Cambridge, Mass.

Early in January, 1896, at the suggestion of Professor C. H. Thurber, the committee proceeded to organize by correspondence, each member sending his vote to William H. Smiley, of the Denver High School.

This action resulted in the election of Dr. A. F. Nightingale, superintendent of the Chicago high schools, as chairman, and Mr. William H. Smiley, principal of the Denver High School, District No. 1, as secretary.

As no appropriation had been made for the prosecution of the work by the committee, no general conference was held this year, but members of the committee as individuals, yet acting in their official capacity, sent out circulars, collected opinions, gathered statistics, and requested the various educational associations of the country to enter upon a discussion of questions correlated with the general subject of college-entrance requirements.

The chairman also invited the four associations which were maintained for the purpose of furthering the interests of secondary and college education to appoint each a committee of three to co-operate with the national committee in its investigation of all matters pertinent to the general subject of inquiry.

Accordingly there were appointed, from the New England Association of Colleges and Secondary Schools, Messrs. Albert Bushnell Hart, John Tetlow, and Ray Greene Huling; from the Association of the Middle States and Maryland, Messrs. Melvil Dewey, E. H. Griffin, and Wilson Farrand; from the Southern Association, Messrs. W. P. Trent, E. A. Alderman, and W. H. Bartholomew; from the North Central Association, Messrs. G. B. Gilbert, J. H. Canfield, and W. H. Butts.

The national committee, altho no general conference had been held, presented its first unofficial preliminary report at the meeting of the National Educational Association at Buffalo, July, 1896. This consisted of one hundred and fifty pages of printed matter, which was published in the June number of the *School Review*, thru the courtesy of the University of Chicago and of Professor Charles H. Thurber, editor and member of the committee.

The report was devoted largely to a tabular statement of entrance requirements to sixty-seven representative colleges and universities of the

United States, with a résumé and critique of the requirements in the different subjects, by members of the committee and others who were deeply interested in these tables.

This June, 1896, number of the *School Review* is a very valuable document, since it presents for the first time since 1879,[1] in a compact form, in parallel columns, the requirements for admission to the A.B., Ph.B., and B.S. courses of the leading colleges and technological schools of the country. These requirements deserve careful study, and the more they are studied, the more conflicting, incongruous, and unsatisfactory will they appear, and the keener will be the appreciation of the absolute necessity of radical reforms, and the reasonableness of the suggestions in the reports to follow. In the same volume appears a semi-official report of the chairman, from which we extract the following:

There is no educational subject before the American people requiring more serious attention, demanding a calmer discussion, greater wisdom, a keener appreciation of the trend of present civilization, and a loftier spirit of altruism than that which relates to an *American* system of education which shall be consistent with psychic law from the kindergarten to the graduate school of the university.

The kindergarten has not as yet become an integral part of the public-school system, but its claims are being rapidly recognized The common-school curriculum, both urban and rural, is in a plastic state, awaiting the touch of inspired artists. The colleges are much at variance as to what constitutes a liberal education in these closing years of a century which began with scarcely any difference of educational opinion; while the secondary schools, awaiting, on the one hand, the abridgment and enrichment of the common-school curriculum, and, on the other, a more uniform expression of opinion on the part of the colleges as to their functions, are suffering from their inability to supply the deficiencies of the former or to satisfy the demands of the latter.

It is generally admitted that, until secondary education commences, children should have much the same training; yet even in the lowest grades individual direction should not be lost sight of, as the mind very early gives evidence of a divine implanting which must not be ignored. Thruout the course of secondary instruction, surely, there must be no Procrustean bed which every pupil by some process of dwarfing or stretching must be made to fit, but natural endowments, as soon as discovered, should have full scope, within certain limitations. College courses ought to be so adjusted that every pupil at the end of a secondary course recognized as excellent, both in the quality and quantity of its work, may find the doors of every college swing wide to receive him into an atmosphere of deeper research and higher culture along the lines of his mental aptitudes. We do not mean that secondary programs should be purely elective, but that they should be eminently elastic, and that this elasticity, based upon psychological laws, should be recognized by the colleges. There is no identity of form, either in mind or matter, in the natural or the spiritual, and since power, power to adapt one's self to the sphere for which nature designed him, is the end of education, every student should find in the college and university the means by which that power may be secured.

The universal recognition of this oneness of education would bring about harmonious relations between the secondary schools and the colleges. A careful study of the requirements of admission in the *School Review* for June, 1896, seems to indicate a wide divergence of opinion, which we believe does not really exist. The discussions of recent

[1] Dr. A. F. Nightingale, chairman of this committee, prepared a similar volume, which was published by D. Appleton & Co., in 1879.

years, the admirable report of the Committee of Ten, and the agitation it has provoked, the deliberations of the various associations formed to bring about unity in diversity, all point to a wise and happy solution of this vexed problem.

The results of the conferences held at Columbia College are encouraging in the extreme (*Educational Review*, May, 1896). It is the most advanced step in the right direction which has yet been taken.

These conferences took on a local color, but the unanimity of their conclusions presages the feasibility of national unity on this same matter.

The secondary schools are the schools of the people, and the people have demanded, and in still more effectual ways will demand, that their courses must be practical, beneficial, disciplinary. The sciences no longer knock at the doors for admission. They have been admitted, and a larger and still larger place will be provided for them.

Physiography, biology, physics, chemistry, in all their elementary principles, and in their relations to man, whose duty and privilege it is to conquer nature and to make it subservient to his advancement and happiness, are no longer to remain in the category of informational studies, and suffer the opprobrium of being contrasted with the humane and the literary as the sole dispensers of intellectual culture. The sciences, as they are beginning to be taught in our best schools, add to the wealth of mind as well as to the stock of facts, and the colleges must recognize them as full equivalents for other work which they have hitherto demanded to the exclusion of science.

In pleading for uniformity in college-entrance requirements, there are a few vital facts which cannot be ignored: First, the triple function of the public high school, viz., to equip pupils for the business of life, to give a proper training to those who will teach in the common schools, and to prepare for college. Secondly, a majority of our young people who go to college come to a decision late in their secondary course. Thirdly, every young man or woman who has successfully devoted at least four years to earnest study in a well-equipped secondary school should be admitted to any college in the country, whether such a pupil has devoted a greater part of his time to Latin, Greek, and mathematics, or to Latin, modern languages, and mathematics, or to Latin, mathematics, and the sciences, or to any other combination of studies which has developed his power and been in harmony with his intellectual aptitudes. To this end, secondary programs of study should be thoroly elastic and with varied electives, suited to the talents of the individual child; a college program should be still more elastic and with a larger number of electives. Every person will then find opportunities for the development of that power which will enable him with confidence to attack the problems of life which he wishes to help to solve.

The public high school can become a link in the golden chain of our American system of education only when the colleges begin where the best high schools leave off; otherwise the gap between the common school and the college must be filled by the private schools, patronized by the children of the rich, and the sons and daughters of the great middle class must be deprived of the benefits of a higher education because, forsooth, they have failed to fulfill some specific requirement of the college they would otherwise enter. I have faith, however, that these conflicting requirements will be harmonized, their incongruities removed, so that we may in the near future have a unified system of education, from the kindergarten to the graduate school of the university, which will give to every child, without let or hindrance, the right of way for such an education as will best develop the power with which, in a plastic state, he has been endowed by the Infinite Architect.

A conference of the committee with members of the committee of co-operation and others interested was held at Buffalo on Tuesday, July 7, 1896.

In the absence of Chairman Nightingale, who spent the summer abroad, Mr. W. H. Smiley presided. A committee, consisting of Dr. James E. Russell, Dr. Melvil Dewey, and Professor Elmer E. Brown, was appointed to draft a plan of work for the general committee for the year 1896–97.

This committee presented the following at the conference held on Wednesday evening, July 8, Dr. B. A. Hinsdale acting as chairman of the meeting:

PLAN OF WORK FOR 1896–97

It is within the province of the committee, according to the resolution passed at the Denver meeting, to investigate existing college-entrance requirements and to report on ways and means of securing such uniformity in extent and method as will be conducive to the best interests, both of higher and of secondary education. The first step in investigation of existing requirements has been taken; in our opinion the program of the ensuing year should be chiefly as follows:

1. The committee should invite the active co-operation of associations already organized for the study of such problems; it should appoint representative subcommittees of specialists interested in the various subjects; it should ascertain the views of individual institutions — secondary schools, colleges, and universities — all with a view to the ultimate determination of what should constitute a normal requirement in each of the subjects set for the admission to college.

2. To this end it is recommended that the requirements be considered in the following groups: English, classical languages, modern languages, history, mathematics, and sciences.

3. Within the several groups special attention should be given to what should constitute a year's work in each subject (e. g., first-year French; second-year French, physics, chemistry, etc.); or, as may be preferable in some groups, what should constitute the "elementary" and what the "advanced" requirements, and, in general, the constitution of entire courses of study in the separate subjects.

4. It is recommended that a schedule of options or equivalents within the various groups, or between separate groups, be prepared.

5. The committee should make special effort to secure a more satisfactory method of admission to college. The views of the associations, subcommittees, and institutions (above referred to) should be sought as to the best pedagogical means of testing the work done in preparation for college.

6. All partial reports should be submitted to the committee as early as possible, that a tentative report may be prepared for discussion at the next annual meeting of the National Educational Association.

7. The Departments of Higher and Secondary Education and of Science should be requested to make this subject a special order in their program for the meeting of 1897.

8. It is evident that the work outlined cannot be done without the expenditure of a considerable sum of money. This committee should urge upon the Departments of Higher Education, of Secondary Education, and of Science the necessity of petitioning the Board of Directors of the National Educational Association for an appropriation, to be made at as early a day as practicable, sufficient to complete the work.

General discussion of the report, as it was read seriatim, followed, and it was finally adopted as reported by the committee. At the joint meeting of the two departments on the following day it received the unanimous approval of the large body of representatives of secondary and higher education in attendance.

Professor West, of Princeton College, and Professor Kelsey, of the University of Michigan, expressed the opinion that the American Philological Association would be willing to co-operate with the joint committee by presenting at a later stage classical programs prepared by the association. The members of the committee accepted gratefully and unanimously this suggested help, and on motion of the secretary an invitation was extended to the Philological Association, by unanimous vote of the two departments, to prepare a report on Greek and Latin. The invitation was accepted by the Philological Association, which proceeded to make an investigation of remarkable thoroness and efficiency. The report of its committee (Professor Thomas Day Seymour, of Yale University, chairman) is presented in Part II of this report. The co-operation of the Science Department of the National Educational Association, tendered thru its president, Professor Bessey, was also gladly accepted. The reports of several committees appointed by this department also appear in Part II.

In the autumn of 1896 Chairman Nightingale sent a request to the American Historical Association to appoint a committee to prepare a report on the scope and place of history in the secondary schools, with model courses of study for the same. A committee of seven was appointed, with Professor A. C. McLaughlin, of the University of Michigan, as chairman. Its most excellent report is presented herewith in Part II. Professor C. H. Thurber attended the meeting of the eastern branch of the Modern Language Association of America at Cleveland in December, and the chairman of the committee met with the western branch at St. Louis at the same time. As a result, a committee of twelve was appointed by this association, with Professor Calvin Thomas, of Columbia University, as chairman, to prepare a report on German and French, with model courses of study for secondary schools. Its very exhaustive report is also to be found in Part II.

A second preliminary report of the committee was presented at the meeting of the National Educational Association at Milwaukee, July, 1897, which was printed by courtesy and without expense to the committee in the June, 1897, number of the *School Review*. We quote the following from the report presented by the chairman at that time:

> The committee, sensible of its responsibilities, and sensitive that no means were provided for their proper discharge, has labored, with a zeal fed by its intense interest in the problem, to make a commendable advancement along all lines. Every educational association in the country dealing in any respect with secondary-school and college work has given this question a prominent place upon its program. Educational papers and magazines have abounded with articles on this subject. The secular press has not been remiss in its instruction to the public, and never in the centuries of our educational history has there been a tithe of the interest awakened that now exists in bringing about that harmony which ought to, and eventually must, prevail between elementary, secondary, and higher education in this republic of free schools, of free opinions, and of universal suffrage.

There must be the closest affiliation between the secondary schools and the colleges. This can be brought about only by the adoption of a plan that shall be consistent with what the secondary schools can do, and what the colleges must have. It is not, however, a question of compromise or of expediency; it is rather one of psychology, or, to use a rational term, of common-sense and justice. All omens point to a successful issue. One after another the old idols are broken. The giants that stood in the path and said to every student, "Let him who enters here" leave all behind but Latin, Greek, and mathematics, are growing limp and lifeless. Requirements for admission are being leveled up; wide options are to be allowed; the element of value in preparation is to be a time element; Harvard, Cornell, Vassar, University of Michigan, University of Chicago, and Leland Stanford, Jr., are unfurling their banners of freedom. There is already a path blazed thru the thicket and jungle of conservatism and tradition, and before the twentieth century dawns in its glory there will be a broad highway thru which a pupil may walk unfettered, amid attractive associations, from the kindergarten to a degree at the end of the postgraduate course of the university, and still will the people of the future be able to say, "There were giants in those days."[1]

At a meeting of the committee at the Pfister Hotel it was decided to request from the joint departments the privilege of adding four members to the committee. The privilege was granted, and the balloting resulted in the choice of Professor H. B. Fine, of Princeton University, and Dr. Edmund J. James, of the University of Chicago, to represent the Department of Higher Education, and of George B. Aiton, inspector of high schools, state of Minnesota, and Ray Greene Huling, of the English High School, Cambridge, Mass., to represent the secondary schools. These gentlemen accepted, and have since acted with the committee. At this conference it was also decided to ask the National Educational Association for an appropriation to enable the committee to finish its work, which had thus far been prosecuted at individual and private expense. A subcommittee was appointed for the purpose, and the directors voted to appropriate $500, provided the funds of the association would permit.

Another year passed, and it was learned only at the meeting at Washington, July, 1898, that the money had been voted. During the winter the chairman requested the American Mathematical Association to prepare a report on the subjects in which it was especially interested. The request was too late for the general association, but the Chicago branch was empowered to appoint a committee to study the matter and to report. Professor J. W. A. Young, of the University of Chicago, was chairman. He labored with commendable zeal, sent out circulars, called several conferences, and two or three drafts of a report were prepared, and one, which we print in Part II, was presented.

[1] "And, lastly, public sentiment among those who have the schools in charge must devise some way by which all grades of schools, from the kindergarten to the college, shall be so correlated that there shall be a straight and open pathway from the lowest to the highest — with no hurdles to jump over and no hoops to jump through — along which free-acting children may be led by teachers acting freely within the necessary limits of relativity." (George H. Martin, in his *Evolution of the Massachusetts Public-School System*, D. Appleton & Co.; p. 276.)

Efforts were put forth, in the meantime, to secure the elaborate reports which had been promised by the eminent committees of the different associations which were co-operating with the national committee, and when it seemed probable that all these reports would be ready, the chairman called a conference of the general committee in Chicago for April 13, 14, and 15 of the present year.

Thru the courtesy of Dr. William R. Harper, who welcomed the committee in a brief address, and thru the generous kindness of the Quadrangle Club, every facility in the way of rooms and entertainment was provided at the University of Chicago. The first session was held at the Haskell Museum, where the chairman presented a general outline of the work to be done. All other meetings — and there were three sessions a day for three days — were held at the Quadrangle Club. Subcommittees were appointed on the several subjects of study, and their reports were discussed and amended, or approved and passed. All resolutions were presented and debated in general session. To aid the Committee on Science and English, Dr. John M. Coulter, head of the department of botany, Dr. Alexander Smith, professor of chemistry, of the University of Chicago, and Mr. Charles W. French, principal of the Hyde Park High School, were invited to meet with the subcommittees. Their counsels were highly appreciated and of great value. Ten of the national committee and two of the advisory committee were present at all the sessions. Letters were received from the four absentees of the general committee, giving special and satisfactory reasons for their forced absence. Excellent letters, containing many valuable suggestions, were received from Professor Albert Bushnell Hart, Dr. John Tetlow, Dr. Melvil Dewey, Principal W. H. Bartholomew, Professor William P. Trent, Professor Edward H. Griffin, Dr. James H. Canfield, and Mr. Wilson Farrand. The reports that follow, both that of the regularly appointed Committee on College-Entrance Requirements and those of the special committees appointed by the eminent associations organized for the purpose of advancing the interests of higher education along special lines, are the result of four years of thought, study, and investigation. They contain not only the opinions of the scores of distinguished educators whose names are appended to the special reports, but they also embody the conclusions of conferences, institutes, and conventions, which have zealously studied this question since the meeting of the National Educational Association at Denver in July, 1895. They are submitted, therefore, with confidence that they must in a large degree meet with the approval of the better class of colleges and secondary schools of the country.

ENGLISH

The committee presents first the proposition that the study of the English language and its literature is inferior in importance to no study

in the curriculum. It offers all, or nearly all, the opportunities for mental training afforded by the study of any language, and introduces the pupil to the literature of his own tongue, which must always be the chief source of his own thought, inspirations, ideals, and æsthetic enjoyment, and must also be the vehicle of his communication with his fellow-men. Hence this study should be placed in a position at least not inferior to that allotted other languages.

The course of study in English should include two elements: the study of English literature, and the cultivation of the art of expression; to the end of securing, respectively, sympathetic and comprehensive appreciation of the writings of great thinkers, and the power to use language in a clear, logical, convincing, and agreeable manner. Such study, for the accomplishment of both of these aims, should include the reading of many works of literature carefully selected, the study of the principles of composition and literary style, and abundant practice in production, in obedience to the principles studied under the inspiration of the pleasurable reading of good books.

The subjects selected should be in themselves dignified and elevating, taken from the higher or spiritual environment of the pupil, as found actually in his school work, and from the environment of his common life.

The study of the principles of composition should include the following subjects: a study of words as to their origin and meaning; a study of the structure of the sentence and of the larger units of discourse—in other words, concrete logic; a study of the principles of effective literary composition, as illustrated in the various divisions of literature; and also a study of the æsthetics of literature.

These need not in all cases be taken up formally as grammar and rhetoric. Usually it is better that they be studied in connection with literature and composition; but they should not be neglected. A pupil completing a course in English, or any specific portion of such a course, should be able to appreciate literature that falls within the possibilities of his comprehension, and to express logically, and in good style, such thoughts as he is capable of expressing at all. This should be the test.

Furthermore, the committee recommends that the two departments, literature and composition, be pursued side by side thruout the entire secondary-school course, and that they be so related thruout that one shall, in so far as possible, supplement and strengthen the other.

We desire to express approval of the following principles:

1. That there should be no difference between the regular courses and the college-preparatory courses in English in secondary schools;

2. That the college requirements in English should be distributed thru the four years.

In accordance with the above, we recommend the following suggestive outline of a course of study in English, the main points of which are in

accordance with the paper presented by Mr. W. F. Webster, of Minneapolis, and thoroly discussed at the Washington meeting of the Secondary Department of the National Educational Association:

FIRST YEAR — FIRST HALF

LITERATURE — NARRATION.

Narratives in both prose and verse, some brief, some of greater length, selected from such authors as Scott, Poe, Tennyson, Lowell, Whittier, Browning, Stevenson, and Kipling, representing various qualities of style, which qualities should be clearly pointed out to the pupils. The selections should be well within the comprehension of the pupils. The following plan of study is suggested:

1. *Meaning of the author.*
   a) Outline of story.
   b) Incidents in the lives of characters.
   c) Central idea and purpose of the story.
2. *Method of the author.*
   a) Does the interest center in the incidents or in the characters?
   b) Is there a climax?
   c) Do all the parts converge to this point? (unity).
   d) Are the parts arranged in a sequence? (coherence).
   e) Is the interest sustained?
3. *Style of the author.*

It is suggested that here special attention be given to the movement of any selected passage (verbs).

COMPOSITION — NARRATION. To give spontaneity.

1. *Incidents.* (It is better that at this stage of study pupils compose tales without regard to plot.)
   a) Selection of material (unity).
   b) Arrangement of material (sequence, coherence).
   c) Proportion in treatment (mass, emphasis).
2. *External form of composition.*
   Heading, margins, indentations of paragraphs.
3. *Grammar study.*

Review of principles. (Attention should here be called especially to the sentence as the unit of thought. Attention should also be given to inflection of pronouns and verbs, agreement of verbs and pronouns.)

Concord.
Punctuation.
Capitalization.

4. *Figures of speech*, based on likeness.
   Simile.
   Metaphor.
   Personification.

FIRST YEAR — SECOND HALF

LITERATURE — DESCRIPTION.

Examples of description.

Examples illustrative of various styles of descriptive literature, in both prose and verse, should be selected from such authors as Hawthorne, Lowell, Gray, Goldsmith, Poe, Blackmore, Burroughs, and Kipling. Some of the books should be studied in class,

others assigned for home reading. In some cases it is well to study in class portions of a work of considerable length and require that the remaining portion be read at home.

The same general plan of study as that suggested for the first half of the year should be followed.

1. *Meaning of the author.*
2. *Method of the author.*
   a) Does he retain his point of view? (unity).
   b) Does he arrange details in order? (coherence).
   c) Are they treated in right proportion? (emphasis).
3. *Style of the author.*
   a) Words that produce pictures.
   b) General words or specific words.

(It is well here to introduce a somewhat thoro study of words, as to origin and meaning, and of the analysis of words into their various elements.)

COMPOSITION — DESCRIPTION.

Aim, accurate expression. Subjects to be individual rather than general. They should be such objects as the pupil has seen, or is able to reproduce from imagination, concerning which it is possible for him to find adequate expression.

Treatment. The selection of details should be decided by the purpose of description.

A point of view should be secured and held (unity).

Details should be arranged with some plan (coherence).

Arrangement and proportion of details should effect a purpose (mass, unity).

Technical subjects — *paragraph structure.*

Having secured in the previous half-year a clear conception of the sentence and its arrangement, the combining of sentences in paragraphs can now be properly considered.

This consideration should include not merely the construction of paragraphs, but such arrangement of the sentences within them as shall secure clearness and proper emphasis.

Words. Continuation of the analysis of words and of the study of their history. Selection of words which give pictures (rhetorical figures). Specific words and general terms compared. Nouns, adjectives, verbs. A review of etymology regarding them.

SECOND YEAR — FIRST HALF

LITERATURE — EXPOSITION. Lyrical poetry.

Attention should be given to the study of those authors who have not merely told stories well and described objects well, but have expressed ideas in such a way as to make them convincing. Many selections of lyrical poetry also can be properly studied. Poems should be selected that are not too difficult of comprehension, that have an easy, flowing movement, and that are pleasing because of the freedom of their rhythmical qualities, as well as for the the beauty of the thought. The following points may profitably be considered, under the headings already indicated:

1. *Meaning of the author.* Indicate the main thesis and subordinate propositions, their proper dependence and their relative importance (especially for exposition).
2. *Method of the author.*
   a) Does he stick to his point? (unity).
   b) Does he pass from the known to the unknown? (coherence).
   c) Does he arrange the material to get the highest effect? (emphasis).
3. *Style of the author.* His use of connectives, conjunctions, relatives, adverbs, and phrases.
   a) How does he obtain clearness?
   b) Are his figures of speech and comparisons effective?

COMPOSITION — EXPOSITION. To encourage logical thinking and adequate expression.

Terms. Definitions.

Propositions.

1. Clear statement of proposition (key sentence).
2. Discussion as limited by the above.
   a) What shall be included? (unity).
   b) What shall be excluded? (unity).
   c) In what order? (coherence).
   d) In what proportion? (emphasis, mass).

SECOND YEAR — SECOND HALF

LITERATURE — EXPOSITION (*continued*). Poetry.

Suggestions made for the first half year should be here followed.

COMPOSITION — EXPOSITION.

Paragraph structure.

Study of paragraphs introduced the preceding year should be here followed with much practice.

A further study of connectives, and methods of transition.

Clauses.

Sentences. Periodic, loose, balanced.

To make pupils think a whole sentence before writing, insist on many periodic sentences. Compare the effect of long and short sentences.

Study of argumentation.

THIRD YEAR — FIRST HALF

LITERATURE. Introduction of character study, as exemplified in the novel. Poetry.

Novels, representing the different classes of fiction, for study both in school and at home. It is best to select novels not too long, and those that have abundance of incident.

Meaning of author.

Method of author.

Is the interest centered in plot or in the characters? Do the details work toward a climax? (unity).

Are the parts arranged in the best order? (coherence).

Style of author. As exemplified in his power to picture, to phrase, to draw characters, to arouse emotions.

The principles already studied should be continually reviewed as occasion occurs. Attention, however, may now be drawn to some of the refinements of composition. Continually increasing attention should be given to the best word for the place in every instance. Pupils should now be led to express themselves, not only with accuracy, but with some degree of elegance. It is well to call attention to the fact that the best authors use the simplest language, and that for English-speaking people words of Anglo-Saxon origin are commonly best. Care should also be given now to the arrangement of words, with the special view to securing force, smoothness, and elegance. Subjects of composition should be drawn to a considerable extent from the literature studied. It is also well to draw upon the other subjects of the curriculum for suitable topics, particularly history and science. Stories, episodes, conversations upon various topics, descriptions of scenes, character sketches, are good topics. It is also well that occasionally outlines of compositions upon the various subjects be prepared by the students.

THIRD YEAR — SECOND HALF

LITERATURE — DRAMA.

It is suggested that the literature of this half-year be the drama, with special reference to Shakespeare. Attention should be given to the grammatical construction, especially to the difference between the plot and a narrative poem. In this connection it might be well to read some such critical studies of poetry as may be found in the works of Matthew Arnold and James Russell Lowell.

COMPOSITION.

Composition work of this half-year may very properly be largely studies of characters of the drama, and the critical treatment of the various plays studied, from the student's point of view. This last phrase is important; the student should not merely read the plays, but should study them, and should give expression, not to the teacher's nor the critic's view, but to his own.

FOURTH YEAR

During this year literature should be studied with due attention to the history of its development. It is well to select for study some works which will test to the full the student's mature power. Pupils should now learn to meet new difficulties, both in thought and vocabulary.

The technical work of this year, to take the place of the grammar and rhetoric suggested for the earlier years, should be based largely upon the study of the history of the English language.

COMPOSITION.

The composition work of this year should be varied in topic and style. Some compositions of considerable length should be required. These should be upon subjects that will employ the student's most mature thought. Considerable time should be spent in their preparation, and they should be examined and criticised step by step by the teacher. At the end of the course in English each student should be required to submit a final essay or thesis upon some literary subject, to show to a degree his appreciation of the work done, and to illustrate as fully as possible his power of expression.

The committee recommends that four periods per week for four years be allotted to the work in English, and that at least one-half of this time be devoted to the department of literature.

The committee recommends that a suggestive list of books, graded and classified, be offered, not less than thirty for each year, from which list selections shall be made by the various schools, not less than five books of average length, or a total of 1,000 pages, covering both class work and home reading, to be required for each school year.

LIST OF BOOKS

The following list, as the committee states, is simply suggestive. Principles and preferences, local and literary, will always govern in the choice of books which teachers will urge their pupils to read and which they will prefer for class study. The main purpose is to inculcate a taste for the best reading in the young people of today, to help them to form the reading habit, and to guide them into the way of a critical study of authors. We believe there should be in our secondary schools, and in the requirements for college in English, no hard and fast rule as to just what books

should be read or studied. Uniformity may be excellent, but equivalents should be accepted. The list below contains all that the joint conference recommends both for general reading and for careful study. Many more are given. They are graded and may be readily classified. They are submitted, not as the best list, for there is no such, but as a collection of good books worthy to be read, worthy to be studied, and among which we believe a sufficient number may be found which will interest, instruct, and entertain the pupils of every secondary school.

FIRST YEAR

1 *Snow Bound* - - - Whittier
2* *Tales of Shakespeare* - - Lamb
3 *Wonder Book* - - Hawthorne
4 *Tanglewood Tales* - - Hawthorne
5* *Jungle Book*, No. 1 - - Kipling
6* *Jungle Book*, No. 2 - - Kipling
7 *Betty Alden* - - - - Austen
8 *Sharp Eyes* - - - Burroughs
9* *Autobiography of Franklin* - Franklin
10* *Tom Brown at Rugby* - Hughes
11 *Story of a Bad Boy* - - Aldrich
12* *Nicholas Nickleby* - - Dickens
13 *Two Years before the Mast* - Dana
14* *Bunker Hill Speeches* - Webster
15* *Sketch Book* - - - Irving
16* Washington's *Rules of Conduct, Farewell Address*, and Lincoln's *Inaugural* and *Gettysburg Speech*
17* *Man Without a Country* - Hale
18 *Hans Brinker* - - - Dodge
19 *Ivanhoe*[1] - - - - Scott
20* *Quentin Durward* - - - Scott
21* *Tales of a Wayside Inn* - Longfellow
22 *The Story of the Indian* - Grinnell
23 *Tales of New England* - - Jewett
24 *Being a Boy* - - - Warner
25* *Merchant of Venice*[1] - Shakespeare
26 *The Choir Invisible* - - - Allen
27* *Life of Washington* - Irving-Fiske
28 *Cuore* - - - - De Amicis
29 *Back of the North Wind* McDonald
30 Macaulay's or Chesterfield's *Letters*

SECOND YEAR

1 *Vision of Sir Launfal*[1] - Lowell
2* *Lady of the Lake* - - - Scott
3* *Marmion* - - - - - Scott
4 *Lyrics and Sonnets* ("Cry of the Children") - - Mrs. Browning
5* *The Lake Poets*, Wordsworth, Coleridge, Southey
6 *Julius Cæsar*[1] - - Shakespeare
7 *Translations from the Iliad* (Books I, VI, XXII, XXIV)[1] - - Pope
8 *Last of the Mohicans*[1] - - Cooper
9* *Tales of a Traveller* - - - Irving
10 *The War of Independence* - Fiske
11 *Young Folk's Plutarch* - Kaufmann
12* *Apology of Socrates* - - Plato
13 *Back Log Studies* - - - Warner
14 *Brave Little Holland* - - Griffis
15 *Julius Cæsar* - - - Froude
16 *Little People of Asia* Olive T. Miller
17* *Bulfinch's Mythology* - - Hale
18* *Twice Told Tales* - Hawthorne
19 *John Halifax* - - - Muloch
20* *Kenilworth* - - - Scott
21* *Tale of Two Cities* - - Dickens
22 *Rab and his Friends* Dr. John Brown
23 *The Private Life of the Romans* Preston and Dodge
24 *Hero Tales from American History* Roosevelt and Lodge
25 *Girls and Women* - - Chester
26 *Shakespeare the Boy* - - Rolfe
27 *Innocents Abroad* - Mark Twain
28 *Rudder Grange Stories* - Stockton
29 *The Hoosier Schoolmaster* Eggleston
30 *Ranch Life and the Hunting Trail* Roosevelt

THIRD YEAR

1* *Richard II.* - - Shakespeare
2* *Twelfth Night* - - Shakespeare
3 *Macbeth*[2] - - - Shakespeare
4* *Legends of the Alhambra* - Irving

* In the list of home reading books suggested by the joint conference on English, April, 1899.

[1] College requirements for general reading and composition work, as recommended by the joint conference on English.

[2] College requirements for careful study, as recommended by the joint conference on English.

5 *Silas Marner*[1] - - - - Eliot
6 *Critical Essays* Lowell and Matthew Arnold
7 *Lectures and Speeches*, Wendell Phillips
8 *Wulf the Saxon* - G. A. Henley
9 *Political Ideas* - - - Fiske
10 *The Young Carthaginian* Henley
11 *The Roman and the Teuton* - Kingsley
12 *Minor Poems*[2] - - Milton
13 *Vicar of Wakefield*[1] - Goldsmith
14* *Essay on Friendship* - Emerson
15 *Kidnapped* - - - Stevenson
16 *Our Old Home* - - - Hawthorne
17 *Prophet of Great Smoky Mountain* Craddock
18 *Dombey and Son* - - - Dickens
19 *John Brent* - - - Winthrop
20* *Lorna Doone* - - Blackmore
21 *Paradise Lost*[1] (Books I, II) Milton
22* *Westward Ho!* - - - Kingsley
23* *Prue and I* - - - Curtis
24* *The Newcomes* - - - Thackeray
25* *Autocrat of the Breakfast Table*, Holmes
26 *Uarda* - - - - - Ebers
27* *Lord Clive* - - - Macaulay
28 *Ben Hur* - - - Wallace
29 *Palamon and Arcite*[1] - Dryden
30 *Roman Life in the Days of Cicero* Church

FOURTH YEAR

1* *Hamlet* - - - Shakespeare
2 *Sir Roger de Coverley Papers in the Spectator*[1] - - - - - Addison
3 *Critical Period of American History* Fiske
4 *American Commonwealth* (abridged) Bryce
5 *Essay on Burns*[1] (and *Poems*), Carlyle
6 *Nineteenth Century* - Mackenzie
7 *Life of Charlotte Brontë* - Gaskell
8 *Abraham Lincoln* - - - Schurz
9 *How the Other Half Lives* - Reis
10 *Judith Shakespeare* - - Black
11 *Egyptian Princess* - - Ebers
12 *The Destiny of Man* - - Fiske
13 *Warren Hastings* - - Macaulay
14* *Henry Esmond* - - Thackeray
15 *Princess*[1] - - - - Tennyson
16* *Pride and Prejudice* - - Austen
17* *Marble Faun* - - Hawthorne
18* *David Copperfield* - - Dickens
19 *Les Miserables* - - - Hugo
20 *Rime of the Ancient Mariner*[1] Coleridge
21 *Shakespeare's England* - - Winter
22* *Sesame and Lilies* - - Ruskin
23 *On Style* (Part I) - - Spencer
24 *Speech on Conciliation with America*[1] Burke
25* *Conduct of Life* - - Emerson
26 *Milton and Addison*[2] - Macaulay
27* *Walden* - - - - Thoreau
28 *My Summer in a Garden* - Warner
29* *Essay on Manners* - Emerson
30* *Romola* - - - - - Eliot

FOREIGN LANGUAGES AND LITERATURES

The committee recommends that the courses of study prepared by the committees of the American Philological Association and of the Modern Language Association of America, as printed in Part II, be adopted, with the suggestion that the word "selections" be placed after "Sallust's *Catiline*" in the tables on pp. 701, 702.

HISTORY, CIVICS, AND ECONOMICS

The committee recommends that our colleges and universities should accept as a unit for admission a year's work in economics, including under this head a course in elementary political economy, supplemented by

* In the list of home reading books suggested by the joint conference on English, April, 1899.

1 College requirements for general reading and composition work, as recommended by the joint conference on English.

2 College requirements for careful study, as recommended by the joint conference on English.

adequate instruction in commercial geography and industrial history. It approves the courses of history recommended by the committee of the American Historical Association, with the following proviso, namely: that it is highly desirable that one year of United States history and civil government should be furnished by the secondary schools, and be accepted as a requirement for admission by all colleges and universities. It will be noted in the report of the American Historical Association that it is possible to omit the course in United States history. The committee desires to reaffirm "the principles of college requirements" as given in the report of the committee of the American Historical Association, if it understands correctly the statement in regard thereto. In order to avoid misapprehension, however, the committee feels that it is important to make its understanding of these principles explicit.

As to the meaning of the first principle as formulated there appears no uncertainty, and we approve of it heartily, viz.:

1. That the fundamental scope and purpose of the secondary schools should be regarded.

But the formulation of the second principle, especially when taken in connection with a note thereto, seems open to misconstruction. The principle is stated as follows:

2. That such elasticity be allowed that schools may fit for college and adapt themselves to local environments and local needs.

The note is as follows:

It does not seem wise, etc. (p. 757).

The aim of the Committee on College-Entrance Requirements is to set forth such a series of interchangeable units of substantially the same value as will meet with acceptance everywhere. Local conditions and traditions may give rise to differing groups of college-entrance requirements, but within these groups the several units should have the same value.

That is to say, one unit of history taught in one place should equal one unit of history taught in another place, even tho the subject-matter of the instruction varies.

Such an arrangement will tend to secure greater flexibility of the curriculum, and, at the same time, to preserve all legitimate claims of variation growing out of differences of environment, as well as to break down such claims as are not real.

MATHEMATICS

The committee begs to submit the following report on mathematics. It will be found that our recommendations are in the main in agreement with those of the mathematical conference of the Committee of Ten and with those contained in the appended report of the committee appointed by the Chicago Section of the American Mathematical Society. These

reports contain many suggestions relative to the teaching of mathematics in which we heartily concur, but which we have not thought it necessary to repeat.

I. We recommend that the course in arithmetic required of all students be limited, roughly speaking, to the following topics: the four fundamental operations for integers, and common and decimal fractions; the most important weights and measures; percentage and its application to simple interest; and that it be completed in the sixth grade. An admirable statement of the reasons for this recommendation is to be found in the report of the mathematical conference of the Committee of Ten, and they need not be repeated here. The recommendation involves the omission of commercial arithmetic from the prescribed course in mathematics. If it be deemed necessary, an elective course in this subject may be offered at some convenient time during the high-school period, and in connection with it a course in bookkeeping.

We concur with both committees in urging that the instruction in arithmetic be enlivened by numerous applications to problems which are of immediate interest to the pupil, or can be made so by simple explanations — notably problems of elementary mensuration and physics.

The most important practical end to be secured by the study of arithmetic is skill in accurate reckoning with integers and common and decimal fractions. That the pupil may not lose this skill, after having once acquired it, we deem it indispensable that he be given frequent practice in numerical reckoning thruout the school course. Algebra, metrical geometry, and the physical sciences afford abundant opportunities.

II. We suggest the following arrangement of the course in mathematics from the seventh to the twelfth grades inclusive, assuming the length of the recitation period to be at least forty-five minutes:

Seventh grade—Concrete geometry and introductory algebra -	4 periods
Eighth grade—Introductory demonstrative geometry and algebra -	4 "
Ninth and tenth grades—Algebra and plane geometry - -	4 "
Eleventh grade—Solid geometry and plane trigonometry - -	4 "
Twelfth grade—Advanced algebra and mathematical reviews -	4 "

1. The algebra of the seventh and eighth grades should, at the outset, be mere literal arithmetic. But we are of the opinion that, by limiting the working material to very simple polynomials and fractional expressions, and to equations of the first degree with numerical coefficients, the four fundamental operations for rational algebraic expressions, simple factoring, and the solution of equations of the first degree in one and two unknown quantities may be taught effectively in the course of these two grades.

Young students enjoy reckoning, and elementary algebraic reckoning will interest them far more than the complexities of commercial arithmetic.

The principles of the subject must, of course, be presented concretely, and unnecessary generalizations should be carefully avoided. Simple problems which can be solved by aid of equations of the first degree should be introduced as early as possible. The sooner the pupil appreciates the power of algebraic methods, the sooner will the subject attract him.

2. Concrete geometry may be taught with advantage earlier than the seventh grade. But even in that case we deem it wise to devote half the time given to mathematics in the seventh grade to this subject.

3. The amount of demonstrative geometry which should be given in the eighth grade will depend somewhat upon the knowledge of concrete geometry which the pupil has by that time acquired. In any event, we should question the wisdom of undertaking any systematic study of a text-book of demonstrative geometry in this grade. An important object of the instruction should be to awaken an interest in the demonstrative process, and that may be best accomplished by confining the pupil's attention to the propositions which his concrete work has taught him to appreciate, and which admit of easy demonstration. The theorems which relate to the congruence of triangles, parallel lines, the angle-sum of the triangle, parallelograms, and some of the simpler and more useful properties of the circle, and many of the problems of construction, belong to this category; the propositions which necessitate the consideration of incommensurables do not.

4. We recommend that the time allotted to mathematics in the ninth and tenth grades be divided equally between algebra and plane geometry; and that the course in algebra include: (*a*) a more systematic and comprehensive study of the topics treated in the introductory course of the seventh and eighth grades, with a thoro drill in factoring, highest common factor, least common multiple, and complex fractions; (*b*) radicals and fractional exponents, and quadratic equations in one and two unknown quantities; (*c*) ratio and proportion, the progressions, the elementary treatment of permutations and combinations, the binomial theorem for positive integral exponents, and the use of logarithms.

There is time enough in this course for the topics (*c*), and they seem to us to belong here rather than in the advanced algebra of the twelfth grade, because of their elementary character and general interest. The acquisition, thus early, of a practical acquaintance with logarithms in particular would be of great advantage to the pupil in his work in metrical geometry and physical science. The slight theoretical knowledge of logarithms which it requires is easily within his reach; for the theorems relating to the logarithm of a product, a quotient, a power, and a root are mere restatements of theorems regarding exponents with which he is already familiar, and it is certain to interest him, for it appeals, as few other topics in algebra can, to the utilitarian instinct which is so strong in young students.

5. By "advanced algebra" we mean the remaining topics which are to be found in an ordinary text-book of "college algebra," viz.: the elementary treatment of infinite series, undetermined coefficients, the binomial theorem for fractional and negative exponents, the theory of logarithms, determinants, and the elements of the theory of equations.

III. In solid geometry, plane trigonometry, and advanced algebra the schools should insist upon the same amount of work and aim at the same standard of scholarship as the best American colleges require in their courses in these subjects.

IV. When a student who is preparing for college does not intend to offer advanced algebra, he should defer some or all of the mathematics of the eleventh grade until the last year of his school course, or be given opportunity for mathematical reviews in that year.

V. We recommend that the several mathematical subjects count toward satisfying the requirements for admission to college, as follows:

(*a*) Elementary algebra, as defined in II, 4	1½ units
(*b*) Advanced algebra	½ unit
(*c*) Plane geometry	1 "
(*d*) Solid geometry	½ "
(*e*) Plane trigonometry	½ "

SCIENCES

We recommend that "nature study" of the kind described in an appended report, Part II, be made an integral part of the school work preceding the high-school period.

We recommend the following arrangement of courses in natural and physical science in the high-school period itself:

First year	Physical geography
Second year	Biology: botany and zoölogy, or botany, or zoölogy
Third year	Physics
Fourth year	Chemistry

and that the time allowance for each of these courses be at least four periods a week thruout the year.

This allowance seems necessary to entitle these subjects to recognition (as one unit each) in a list of college-entrance requirements.

So far as the reports in our possession have enabled us to do so, we have indicated in some detail what the character of these courses in science should be. Unfortunately, this has been impossible in the case of physics and zoölogy,[1] and we recommend that the Committee on Physics and Zoölogy appointed by the Natural Science Section of the National Educational Association be again requested to supply detailed descriptions of suitable school courses in these sciences.

[1] The report on zoölogy is inserted in Part II, but came too late for inspection by the committee.

The committee also makes the following general recommendations: In our opinion it is important that the last two grades that now precede the high-school course should be incorporated in it, and, wherever practicable, the instruction in those two grades should be given under the supervision of the high-school teacher.

This recommendation really means a six-years' high-school course of study, and therefore that the qualifications of the teachers of the seventh and eighth grades shall not be inferior to those of the teachers in the remaining high-school grades.

PHYSICAL GEOGRAPHY

The committee approves the report of the Subcommittee on Physical Geography appointed under the auspices of the National Educational Association, appended to this report; and it accordingly recommends:

1. That this committee adopt the definition of physical geography given in the report of the Subcommittee on Physical Geography appended to this report, namely, "the physical environment of man;" and that its principal themes are, the earth as a globe, the atmosphere, the ocean, and the lands, all appropriately limited in scope and difficulty by the time at the disposal of the course and the capacity of high-school pupils, and all taught "with the motive and the special point of view defined above;" and that "the distribution of organisms should not be taught with reference to zoölogical and botanical classifications, but in exposition of the organic environment of man, and as itself controlled by physiographic and other influences."

2. That in public high schools and other secondary schools physical geography be taught in a course occupying not less than four periods a week during one school year; and that this course should be placed in the ninth grade (first high-school year, in the present organization of most public schools).

3. That the course in physical geography should include a large amount of field and laboratory work; and lectures, discussions, and textbook study should, so far as practicable, be related to such work. Notebooks should not be an end in themselves; they should be kept in such a way as to emphasize the spirit and method of scientific work.

4. That the course in physical geography outlined in the foregoing propositions, when satisfactorily completed, count as one unit toward satisfying the requirements for admission to college.

BIOLOGY

The course in biology in the second year of the school course may consist either of a half year of botany and a half year of zoölogy, or of a whole year in either science.

BOTANY

1. That in public high schools and in preparatory schools botany be taught in a course occupying not less than one-half year, and preferably one year, with at least four exercises a week.

2. That this course in botany include a large amount of individual laboratory work, supplemented by as much field work as possible, done by the pupil under the careful direction of a competent instructor, and recorded by the pupil in the form of careful drawings and descriptions in a permanent notebook.

3. That such laboratory work, including the keeping of the notebook, occupy approximately one-half of the whole botany assignment, double periods of time being given to each laboratory exercise.

4. That the course also include instruction by text-book, informal lectures, and frequent quizzes, elucidating and enforcing the laboratory work, or dealing with matter not touched upon in that work, to the end that the pupil may gain a comprehensive and connected view of biological principles, as exemplified by plants, rather than merely a knowledge of a few disconnected facts.

5. That a pupil who has successfully completed such a course in botany as that here described may offer it for one-half or one unit of work in satisfaction of the requirements for admission to college.

6. That for entering students who have thus satisfied a definite requirement in botany, and who continue the subject in college, there be provided a suitable sequel to the school course in continuation of the study; such students being in no case placed in the same class with beginners.

7. The standpoint of the entire course should be that of plants as living things and at work, details of the structure being entirely subordinated. Observation should be directed to the most obvious facts, those which form a fitting background for subsequent study, and which easily enter into the subsequent experience of those who do not study further. Professional terminology and difficult and expensive apparatus should be avoided as much as possible. Constant and accurate drawing should be insisted upon as the only means of securing and recording definite observation. Great care should be taken not to overload the student with details or to demand too exhaustive a study of single forms. Clearness and variety are essentials in such work.

ZOÖLOGY

The committee presents no special report on zoölogy, but refers to the report on this subject made by the committee appointed by the Department of Science. This report is printed in Part II, and will be found to be in essential harmony with the report on botany.

PHYSICS

Your committee suggests that an effective working basis for a secondary-school course in physics would be attained by planning such a course substantially in accordance with the following propositions:

1. That in public high schools and schools preparatory for college physics be taught in a course occupying not less than one year of daily exercises, more than this amount of time to be taken for the work if it is begun earlier than the next to the last year of the school course.

2. That this course of physics include a large amount of laboratory work, mainly quantitative, done by the pupils under the careful direction of a competent instructor and recorded by the pupil in a notebook.

3. That such laboratory work, including the keeping of a notebook and the working out of results from laboratory observations, occupy approximately one-half of the whole time given to physics by the pupil.

4. That the course also include instruction by text-book and lecture, with qualitative experiments by the instructor, elucidating and enforcing the laboratory work, or dealing with matters not touched upon in that work, to the end that the pupil may gain not merely empirical knowledge, but, so far as this may be practicable, a comprehensive and connected view of the most important facts and laws in elementary physics.

5. That college-admission requirements be so framed that a pupil who has successfully followed out such a course of physics as that here described may offer it toward satisfying such requirements.

CHEMISTRY

Your committee approves the report of the majority of the Committee on Chemistry of the Natural Science Department of the National Educational Association, appended to this report, and it accordingly recommends:

1. That in the public high schools and in preparatory schools chemistry be taught in a course occupying not less than an assignment of four exercises a week for a year; more than this amount of time to be taken for the work if it is begun earlier than the third year of the school course.

2. That this course in chemistry include a large amount of individual laboratory work, including some quantitative exercises, done by the pupil under the careful direction of a competent instructor and recorded by the pupil in a notebook.

3. That this laboratory work, including the keeping of the notebook and the working out of the results from laboratory observations,

occupy approximately one-half of the whole chemistry assignment; double periods of time being given to each laboratory exercise.

4. That the course also include instruction by text-book, demonstration, with qualitative and quantitative experiments by the instructor, and frequent quizzes, elucidating and enforcing the laboratory work, or dealing with matters not touched upon in that work, to the end that the pupil may gain, not merely empirical knowledge, but, so far as this may be practicable, a comprehensive and connected view of the most important facts and principles in elementary chemistry.

5. That a pupil who has successfully followed out such a course of chemistry as that here described may offer it for one unit of work in satisfaction of the requirements for admission to college.

6. *The subject-matter* should include the chemistry of both metals and non-metals. More detailed study should be confined to a restricted list of elements and compounds — say twelve of each — other substances being drawn upon for broadening the course, when required for illustration of principles or for classifying facts.

Attention should be given to the atmosphere, manufacturing processes, and familiar substances.

The treatment.—The selection should be rational, such facts being preferred as can be classified or as lead most directly to principles.

The theoretical matter, including the theory of solutions, equilibrium, etc., should include all that can help in co-ordinating and elucidating the facts.

The presentation should be inductive, as far as possible. The principles and theories should not be stated as dogmas, but should follow the facts and supply the explanation for which a need has already been felt.

Symbols and equations should not be introduced until after quantitative experiments, and then in the character of abbreviated expressions of the results of quantitative work. Such experiments should, therefore, appear fairly early in the course.

Formal qualitative analysis should not form a part of a one-year course.

The laboratory work must be intelligent, and every effort must be made to avoid the mechanical tendency to which it is liable.

RESOLUTIONS

The following resolutions adopted by the committee serve to put in concrete form the leading principles that guided the committee itself in its consideration of the special reports, and which in its judgment are to be considered as first principles in the adjustment of relations between secondary and higher schools. These resolutions, embodying such principles, are what the committee offers in lieu of any ideal program or curriculum. The resolutions that follow are to be considered as covering, not every principle that the committee might wish to see recognized,

but only those which could be discussed and agreed to in the limited time at the committee's disposal.

I. *Resolved*, That the principle of election be recognized in secondary schools.

In this resolution the committee merely indorses a practice already very common in secondary schools. The tendency toward wide option in college-entrance requirements is too obvious to be ignored. The student is no longer limited to a single group of prescribed subjects, which alone secure admission to college study. Not only are many different courses offered by most colleges, but there is increasing latitude of choice in entrance requirements for each of these courses, and it seems probable that this latitude will continue to increase. The committee would agree, for instance, where one year of history is required, that the particular subject in history should not be specified, but that either one of the four typical year's courses recommended by the historical committee should be accepted. In modern languages an option between French and German now generally exists. In science, while the disposition is now to make physics a required subject where only one science subject is offered, yet the committee indorses the tendency to allow election among the other sciences, and, aside from physics, to specify the requirement by amount rather than by subject. At the same time free and unrestricted election is not suggested, but, on the contrary, an election made after the most careful consideration of the matter by the pupil, the teacher, and, if possible, the parents. The administration of such an elective system makes extensive demands upon the insight, tact, and time of the principal, who will, in most cases, be the adviser from the teacher's standpoint. The work of the principal under a properly administered elective system must inevitably be greatly increased by much personal consultation with students and study of the nature and capacity of individual students. The administration of the secondary school at present makes large demands upon the principal along lines that were practically unknown to his work but a short time ago. The principals, the committee believes, are ready to accept these new duties, and to discharge them with fidelity and skill, but it ought to be recognized that in order to do so they must be relieved of mere routine functions. The personal direction of individual students is the most delicate and responsible part of the principal's work, requiring the highest intellectual and moral qualities. It is the duty of school boards to see to it that principals possessing these qualities should be relieved of so much of the drudgery of administration as will give them opportunity to perform properly this highest work.

II. *Resolved*, That the requirements for admission to technical schools should be as extended and thoro as the requirements for admission to college.

If students are admitted to technical schools with lower entrance requirements than those set by the colleges and universities, three consequences follow: (1) that the students enter on the technical studies at

an earlier age; (2) that they have less general culture than is provided by a high-school course; (3) that they leave the high school before the completion of that course. It seems to the committee that the foundation of general culture provided by the full high-school course is none too much for students whose after-studies are to be almost exclusively technical, and yet who, in their professional careers, will be called upon to fill positions where not only technical knowledge, but also general education, and especially the ability to write with ease and precision, will be important elements in their success. Nor does it seem to the committee desirable that students should be admitted to technical studies at an earlier age than that at which they are admitted to the studies of the college course. Technical training is essentially professional training. If a student is able to enter a technical school a year earlier than he can enter a college, and complete his technical studies in four years, he is ready to enter on his professional work at a date three years beyond the time when he would have left the secondary school after completing its full course. The student who chooses the profession of law or medicine, for example, who seeks the best preparation for his career, completes the high-school course, adds to it a four-years' course in college, and to that at least a three-years' course of professional study. He, therefore, enters upon his professional work with six years' more training than the technical student has. There seems to be no valid reason for this very great difference between the best preparation for the so-called learned professions and corresponding preparation for the technical professions.

The difficulties of the secondary schools in fitting students for college are now, and have in the past been, very great, on account of the different specifications from institutions which require theoretically the same amount of preparation. The technical school introduces an additional complication into the problem, and one of very serious import, in that its requirement is not only different in amount from that of the colleges, but also different as to specification. The tendency of this requirement is to develop a special class of schools, such as separate manual-training schools and elementary technological schools, whose function is to prepare students for the higher technical schools. This differentiation, however, does not seem to be in accord with the fundamental principles and ideals of the American educational system. Such a differentiation in secondary schools necessarily limits the field of their usefulness to those students who can reach the specialized institution. Such specialized institutions are apt to be remote and difficult of access, whereas the high school is almost everywhere accessible.

The condition to be desired is that in which a four-years' high-school course shall prepare the student for advanced study along the lines of his choice, whether literary or technical. It is believed by the committee

that it is the general purpose of the technical schools to advance their requirements as rapidly as possible to meet the standard outlined above. There can be no question that the lower and differing requirements for technical schools are becoming a disturbing factor of considerable importance in secondary-school work; nor is it doubtful that this factor would be removed if the requirements for admission both for colleges and for technical schools were made substantially equivalent. It is, of course, not suggested that they should be identical in subject; nowhere does the committee assume that such identity of requirement is desirable.

III. *Resolved*, That the teachers in the secondary schools should be college graduates, or have the equivalent of a college education.

The time is past when a superficial knowledge of a variety of subjects, coupled with a knack for giving instruction and some administrative ability, can be considered sufficient qualifications for teaching in our high schools. In many departments of study work is now being done in these schools as advanced as that done in the first year of the college course. And there is no better reason in the school than in the college for intrusting this work to the care of teachers who lack adequate special training for it.

Of course, it is not proposed that able teachers already connected with our schools should be displaced because of the lack of a college education, nor implied that young men fresh from our universities are qualified for the administrative responsibilities of the high-school principal. The most responsible positions in high-school work will naturally be intrusted to those alone who have been tested in less responsible positions — in the departmental work of the school. Our proposition is mainly concerned with the appointment of teachers to do this departmental work.

Our colleges and universities are now turning out each year numbers of young men and women of liberal training who are eager to teach subjects which they have been pursuing with enthusiastic devotion and distinguished success. Many of them have personal qualities which should fit them admirably for teaching. Surely, it is reasonable to urge that the best teachers for our high schools may be chosen from among them. Not only have they the requisite special knowledge, but they have given evidence that they possess the love of learning, lacking which the teacher is likely sooner or later to lose enthusiasm for his work and become a drudge.

Fortunately, the policy of recruiting the high-school force from college graduates already prevails in many of our great cities, and there is little doubt that the practice will soon become general. It will react most happily on the higher education of our people by enlarging the field of work open to college men and women, and will be a potent influence in elevating our secondary schools to a position as dignified as that now held by the secondary schools of France and Germany.

IV. *Resolved*, That we favor a unified six-year high-school course of study beginning with the seventh grade.

The most necessary and far-reaching reforms in secondary education must begin in the seventh and eighth grades of our schools. Educators agree that these grades must be enriched by eliminating non-essentials and adding new subjects formerly taught only in the high school. These reforms require the highest pedagogic knowledge and the most efficient supervision. In our opinion these problems can be solved most quickly and surely by making the seventh and eighth grades parts of the high school, under the immediate direction of the high-school principal. Recent attempts to teach Latin and German in these grades have not met with the success to which they are entitled, on account of the lack of qualified teachers and competent supervision. The improvements in the mathematical schedules in the grades have not been given a chance to show their value, because the teachers have lacked the technical training and the breadth of view absolutely essential to good teaching in the introductory courses of algebra and geometry. Science study is now acknowledged to have a place in the grades, yet slow progress has been made in producing educational results, largely because the grade teacher has been poorly prepared to teach the subject, and the leading scientists of the country, in their efforts to circumvent this obstacle, have failed to agree on a suitable course of study for the grades.

The proper adjustment of these studies in a unified high-school course would add much to the effectiveness and solidarity of secondary education. The seventh grade, rather than the ninth, is the natural turning-point in the pupil's life, as the age of adolescence demands new methods and wiser direction. Six elementary grades and six high-school, or secondary, grades form symmetrical units. The transition from the elementary to the secondary period may be made natural and easy by changing gradually from the one-teacher regimen to the system of special teachers, thus avoiding the violent shock now commonly felt on entering the high school. The seventh-grade pupils, if thought necessary, could still be taught and given individual attention by one teacher in all but one or two subjects which require the services of specialists. The personality of the teacher and her intelligent direction of the individual student should be insisted on and made more effective than at present. Under the system proposed an inefficient teacher in the seventh or eighth grade would do less harm in blasting bright intellects and in turning able students away from higher study. The inspiration afforded by a well-equipped high-school principal and by a special teacher in language, science, or mathematics would do much to retain desirable students in the high school, thus raising the educational standard of American citizenship. Statistics show that the number of students leaving school at the end of the sixth grade is comparatively small,

while the number is very large at the end of the eighth grade. By the proposed change, the students in the seventh and eighth grades would gradually gain the inspiration of the high-school life, and the desire to go farther in the languages and sciences which they have already begun under favorable conditions. The result would doubtless be a more closely articulated system, with a larger percentage of high-school graduates.

From an administrative point of view, the six high-school grades should eventually be in one building. As far as statistics are accessible on this point, the experiment of placing these grades in the high-school building has been successful, resulting in better scholarship and a greater percentage in the number of students entering the ninth grade. The gradual change to this system would probably lead to the establishment of a larger number of less expensive high schools, thus placing the "people's college" nearer their homes without additional expense to the taxpayer, but with a saving in money and strength to students attending the high school.

V. *Resolved*, That in the interpretation of the recommendations of this committee concerning the subjects to be included in the secondary-school program and the requirements for admission to college, for which credit should be given, it is distinctly understood that all secondary schools will not offer opportunities for the pursuit of all these subjects, and that the colleges will select those only which they deem wise and appropriate.

The very large secondary schools containing six hundred or more pupils are, perhaps, the only ones which can offer all the studies which the committee enumerates as legitimately belonging to a four-years' secondary program. No pupils in these schools can pursue them all, for no study should occupy less than one year, and no pupil should carry more than four regular studies which occur four periods a week. The larger the school, the more elective can be the curriculum, without any considerable extra expense. The smaller schools must content themselves with more rigid programs, but the welfare of the individual pupil should be the first consideration, consistent with the limitations of public funds. Every secondary school worthy the name can offer one, and in most cases two, foreign languages, two years at least of mathematics beyond arithmetic, one or two sciences, one or two years of history, of which one should always be American history with civics, and a full course in English. More languages, more sciences, more mathematics should be added as numbers and funds warrant. The colleges should be very explicit in regard to constants, and equally so in regard to electives and equivalents, and all requirements should be so elastic that a pupil will not find himself, after a good four-years' preparatory course of study, debarred from entering the college of his choice.

VI. *Resolved*, That, while the committee recognizes as suitable for recommendation by the colleges for admission the several studies enumerated in this report, and while it also

recognizes the principle of large liberty to the students in secondary schools, it does not believe in unlimited election, but especially emphasizes the importance of a certain number of constants in all secondary schools and in all requirements for admission to college.

Resolved, That the committee recommends that the number of constants be recognized in the following proportion, namely: four units in foreign languages (no language accepted in less than two units), two units in mathematics, two in English, one in history, and one in science.

The recognition of elective courses in secondary schools is no longer a controversial subject; all educators acknowledge educational values, but these educational values are relative rather than fixed, and depend not so much upon the subject-matter of the study and its intrinsic power to train and develop and strengthen mental fiber as upon the skill of the teacher who is to elucidate, illuminate, and make attractive such study, and upon the innate endowments, the heredity, and the acquired talents of the student. It is believed, therefore, that there should be no absolutely fixed and inelastic requirements for admission to college, except so far as they may be within correlated groups. If, for instance, a college permits a modern language to be substituted for Greek, and the pupil presents in addition a year of mediæval and modern history in place of a year in ancient history, the former should be regarded as a full equivalent for the latter. The same may be said of science. If a pupil finds it more to his taste to pursue the study of biology, or even botany, a year in the place of physics or of chemistry, he should not be embarrassed by the refusal on the part of the college to accept the substitute.

Secondary schools, therefore, should be allowed to arrange their programs in accordance with local environment, the demands of their constituency, and the tastes of their pupils; and when the work in any study is well done and a sufficient amount of it has been acquired, and this work is consistent with that done along other lines, it should be accepted by the college. The committee believes there should be constants in every secondary school. It is difficult, however, to fix these to the satisfaction of all. The committee would, therefore, have the constants in the foregoing resolution regarded as suggestive rather than unalterable. Few colleges, few committees, few boards of education will dissent from the proposition that every pupil should have at least one year of history, one year of some science taught by laboratory methods, and two years of English, including composition and literature; some will argue that there are those who cannot master geometry, and yet, if one has the scholarship which will warrant the expenditure of four years in college, he will have the ability to assimilate algebra and geometry to the extent of two full years of work. The question of foreign languages is a mooted one, and yet most intelligent people will agree that one foreign language—and that, too, pursued four years—or two, each followed two years, is valuable, if for

no other purpose than to give the pupil an enlarged and a more appreciative idea of our incomparable English. These constants are submitted, therefore, as important for every secondary school.

VII. *Resolved*, That the colleges will aid the secondary schools by allowing credit toward a degree for work done in secondary schools, beyond the amount required for entrance, when equal in amount and thoroness to work done in the same subjects in college.

In many, and perhaps most, colleges the plan suggested in the above resolution is already in effect. Such recognition of school work by the colleges will tend to raise the estimation in which the school is held by the community. It will also directly assist the school in its natural effort to induce students to continue their studies in college, for if a student has, on finishing the school course, already one-third or a half year or more of work to his credit that may be counted toward a college degree, this fact constitutes a great incentive for going on with college work. Furthermore, it frequently happens that a student at the end of the last school year has one or two subjects to complete in order to finish the school course. This may happen for a variety of reasons, among which change of school and ill-health are most common. Should the student wish to go to college, two courses are open—either to enter college with conditions, or to remain an additional year in school so as to complete the course. But if the second alternative is adopted, the student, while making up deficiencies, can and should carry one or two additional studies, in order that the year's work may be complete. If these studies cannot be counted for college credit, there is temptation on the part of the student to do light work, and to take only the subjects required, with a tendency to acquire indolent habits of study. If the additional subjects above those required for completing the school course are accepted by the college toward a degree, a strong incentive is offered the student to do the best work possible, and the danger of falling into indolent habits is avoided. This college credit, furthermore, puts into the hands of the school principal one of his strongest arguments for inducing the pupil to remain an additional year at school, so that he may not enter college with conditions. It seems to the committee that there can be no question that the mutual interests of both school and college will be best subserved by making the class of conditioned students as small as possible.

VIII. *Resolved*, That for students who have met a definite requirement in any science, and who continue the subject in college, it seems to us desirable that there be provided a suitable sequel to the school course in continuation of the study; such students being in no case placed in the same class with beginners.

It seems to be a somewhat common practice among colleges to accept a subject for entrance, but not to give it credit after the student has been admitted. This is illustrated specifically by the case in which physics is

accepted as an entrance requirement, but not required of all students. Student A comes to college and presents a year's good work in physics, done in a high school or academy, as one of his entrance subjects. Student B has no physics, but presents something else, which is accepted as an entrance equivalent. In college, however, both A and B take precisely the same course in physics, one having had a year's work, with laboratory experiments, the other not having studied the subject at all. This practice is justified by the colleges on two grounds: (1) that the year's work in the high school really, after all, amounts to nothing, and (2) that it is impossible to make two different classes. The latter argument may be disregarded. In some cases it doubtless is true that the teaching force of the college does not permit the organization of two separate classes, and there is no argument with necessity. But the other argument, that the year's work in the high school is not of any value to the college, is refuted by the college itself, in two ways: (1) by accepting this year's work as of full value for entrance to the university, and (2) by allowing university credit for exactly the same sort of work in other subjects, as, for example, in Latin, French, or German. The student who offers French or German for admission to college is not put into the same college classes in either of those subjects with students who have not presented them for entrance, but is always put in an advanced class, and remains there until he has shown his unfitness. The practice of combining in the same college class students who have had previous high-school instruction and those who have not is most common in the sciences, and while physics has been specified above, all of the sciences that are accepted as entrance requirements share equally in this practice. The effect cannot be otherwise than disastrous upon science teaching in the high school, for if a student goes to college with a year's course in science and finds that work totally disregarded by the college authorities, he can but infer that the school work is without value. He is likely to send the report back to the school, and other students will be deterred from taking the course in science, knowing that they will have to do the work over again when they go to college later. The effect on the student himself who, having had a year's work in science, is required to go again over the same ground, to a large extent, alongside of students who have no previous knowledge of the subject, is most unfortunate. Experience totally disproves the argument that such work is in the nature of a thoro review and is, therefore, beneficial to the student. On the contrary, it is distasteful and tiresome. The student is likely to rely upon his previous knowledge and slight the work as much as possible. It frequently happens, therefore, that the student with the entrance equipment attains no better rank in his class than his fellow who entered without previous knowledge. This does not show, as has been supposed, that the high school is of no value, but it conclusively proves that such repetition is destructive of interest and

calculated to foster careless habits of work. The adjustment of college work to a wide range of elective entrance requirements certainly presents many difficulties, but it seems to the committee that, when the colleges have taken the step of offering this wide range of electives, they cannot well stop there, but are bound, so far as possible, to adjust the college work so that the students may not have to repeat in any branch work that has already been done, and presumably, by the college's own recognition of it, well done, in secondary schools.

IX. *Resolved*, That we approve of encouraging gifted students to complete the preparatory course in less time than is required by most students.

In this resolution the committee desires to approve a principle, rather than to recommend a definite plan for the application of that principle. Gifted students should be allowed special opportunities quite as much in grades below the secondary school as in the secondary school itself, and it seems probable, indeed, that the saving of time may be expected most advantageously in the lower grades. The subject of the grading of pupils below the secondary school is, however, not in the province of this committee.

In laying out a course of study the average student must be the basis of reckoning, but in the schematization of educational work there is constant danger that the interest of the individual student may not be sufficiently considered. There are students who must take more than the allotted time in which to complete the preparatory course, while there are others who can easily finish the course in less than the schedule time. This can be done, too, without overpressure and consequent injury to health. It is a truism that some students acquire much more readily and easily than others. Modern educators do not accept the doctrine of Helvetius, that all men are by birth endowed with the same natural capacities. Instead of cramping and confining the more gifted students, it is the duty of the secondary school to discover them and to furnish them every opportunity for progress in their work. There are difficulties of administration, caused chiefly by the time schedule, which sometimes cannot be overcome; but it seems to the committee that students have a right to expect that the school officers will use their best efforts to overcome these obstacles, and, so far as is consistent with good administration, offer to the students full opportunity for progress according to their individual capacities.

X. *Resolved*, That in general we recognize in schools the admissibility of a second year in advanced work in the same subject, instead of a second year in a related subject; for example, two years in biology, instead of one year in biology and one year in chemistry, where local conditions favor such an arrangement.

Sound pedagogical reasons might be advanced in favor of the general proposition that two years' work in one scientific subject is better

than one year's work in each of two scientific subjects. This principle is, indeed, generally held in regard to language studies. But in adopting the above resolution the committee was influenced mainly by other considerations. In the smaller schools it is not usually possible to have more than one teacher for science. It can hardly be expected that a teacher will be equally able in physics, chemistry, botany, zoölogy, physiography, and the other sciences that enter into the course. With the general trend toward the adoption of departmental work in the schools and the gradual introduction of university-trained specialists into the corps of teachers, there are more and more teachers who are especially capable and well trained in one special branch of scientific study. Where a school possesses such a teacher, better results in scientific training may, and probably will, be obtained by permitting specialization in the field of the teacher's particular interest. Again, in not all schools is it possible to have a number of scientific laboratories. A school may be able to equip one laboratory adequately, but would find it quite impracticable to equip two or three. Since laboratory work is now regarded as an indispensable part of scientific instruction, two years in one science with full laboratory facilities might properly be regarded as better than one year's work in the same science with laboratory facilities plus a second year's work in a different science with laboratory facilities either very inadequate or totally lacking. Where a laboratory is equipped for one year's work in science, the additional expense for equipping it for a second year's work in the same science is inconsiderable as compared with the expense of equipping another laboratory for a different science. For these reasons, mainly, it seems to the committee wise to recognize the substantial equivalence of two years' work in one science for a year's work in each of two different sciences. Some schools would be able to provide a year's work in one science and two years' work in one other science — a total of three years in science. The committee believes that the aim to be attained is a certain amount of scientific training of the proper and adequate sort, but that, so far as combination of subjects to make up this total is concerned, local conditions may properly be a determining factor.

The committee is not to be understood as recommending, as a rule, a second year of study in the same subject, but only that such an arrangement is admissible or desirable under certain conditions.

XI. *Resolved*, That it is desirable that colleges should accept, in addition to the year of United States history and civil government already recommended, at least one-half year of intensive study of some period of history, especially of the United States.

To recommend collegiate recognition of the "intensive study" of history in the secondary schools is only to ask the same recognition for history that is already accorded to other subjects. "Advanced requirements"

in languages, mathematics, and science have long been recognized; no one is likely to assert that an advanced requirement in history is less desirable than such a requirement in other subjects. But the chief reason for this recommendation is, of course, the belief that the secondary school will gain a valuable extension of its course of study—an important source of culture for the best students in history, in particular, but also for all interested pupils.

The elementary course in history gives many glimpses of unexplored fields of knowledge that invite further inspection, and suggests many problems of social development that can be dealt with only incidentally at the time. Intensive study of history permits single pupils, or, at least, groups of pupils, to explore some of these fields, and to attack some of these suggested problems. To gratify the interest in historical study thus aroused is to promote the instinct of true scholarship, and hence afford an admirable preparation for college work.

In a word, intensive study in history affords pupils an opportunity to pursue a favorite subject beyond the usual elementary course in history with which they must otherwise be content. It is, accordingly, a valuable stimulus and a satisfaction to both teachers and pupils. But unless this intensive study can be recognized in college-admission requirements, few schools will be able to provide it.

XII. *Resolved*, That we recommend that any piece of work comprehended within the studies included in this report that has covered at least one year of four periods a week in a well-equipped secondary school, under competent instruction, should be considered worthy to count toward admission to college.

It is the opinion of the committee that a larger option ought to be allowed to high-school pupils in selecting the subjects which they desire to offer for admission to college than is accorded at present. It is felt that the adoption of this policy of permitting larger options lies in the interest of the colleges, and of college education, as well as of the high schools and of high-school education.

The acceptance of this larger option will make it possible for many high schools to prepare properly for college which cannot do so at present, and thus the number of possible college students may be considerably increased.

Many high schools find it impossible to offer one or another of the subjects required for admission to college at present, while they do offer instruction in subjects which there seems to be no adequate reason for excluding from the category of accepted branches.

It will thus become possible for many high schools to undertake the work of preparation for college without seriously impairing that other and perhaps more necessary, work involved in answering the demands of the public for instruction in the specific subjects which the local public insists upon. This will, moreover, permit the individual high-school

pupil a range of choice among the subjects which he may desire to offer, which will be only a legitimate recognition of the elective principle in the sphere of secondary education.

It will be noted that the recommendation of the committee in favor of a wider option in subjects is connected with this positive condition that such a subject must be pursued long enough to guarantee serious work, and that the high school must have adequate facilities for teaching the subject, and competent instructors to handle it.

It is felt that the acceptance of the proposed wider range of options, combined with the insistence upon such a method of treatment, upon such amount of time, and upon such facilities for teaching as will secure good educational results from a disciplinary and cultural point of view, will have a pronounced influence in persuading high schools to adopt the principle of selecting a few subjects in which they can give adequate training, rather than the patchwork system of selecting very many subjects and giving only slight attention to each one, which prevails in so many of our American high schools. And it is believed that this will be a very valuable educational result, which might well compensate for any slightly injurious effects which might possibly flow from allowing this wider option.

There is a general argument in favor of this plan which applies to the elective system in general, so far as it can be properly employed, namely, that the pupils themselves will take a greater interest in their work, will conceive a more earnest desire to attend the college and university, knowing that they have an opportunity to pursue there the studies which have interested and benefited them in the high school. It is believed that the limitation of this recommendation to studies included in this report makes the above recommendation an exceedingly conservative one, and one in which all college and high-school men can unite.

This proposition does not involve of itself, necessarily, the idea that all subjects are of equal cultural or disciplinary value, or even that the subjects here proposed are of equal or similar value. The acceptance of this recommendation does not, therefore, hold the committee to the espousal of any such doctrine, or the association, if it accepts the report and recommendation of this committee. It does involve, however, the proposition that, even tho there may be a difference in the disciplinary or cultural value of these subjects pursued under the conditions indicated, yet the advantages to our educational system of the adoption of this principle will be so great as far to outweigh any incidental disadvantage which may accrue from accepting as of equal value for college purposes the more or less unequal values represented by these studies.

It is certainly a further argument for the wisdom of this recommendation that it is directly in the line of all present movements in the educational field. All the leading associations of college and secondary

teachers in the United States have recently expressed views similar to these incorporated in the recommendation. It would seem, therefore, as if the conditions in different portions of the country were so similar that we have here to do with a principle which is applicable to all sections of the United States.

XIII. *Resolved*, That it is desirable that our colleges and universities should accept as a unit for admission a year's work in economics, including under this head a course in elementary political economy, supplemented by adequate instruction in commercial geography and industrial history.

The present recommendation is really included in the preceding one, and we need not, therefore, spend very much time upon it.

It is worth noting, however, that this is an additional recommendation to those contained in the various reports by the Committees on History and Civics, which from time to time have appeared of late in connection with our educational associations. It is the opinion of the committee that the subject of political economy, which is now taught in one form or another in very many of our high schools, is entitled by its importance, and by its disciplinary and cultural value, to a position in the programs of all high schools, and that, when it is a part of such a program, and is conducted during the entire year, in a school with proper facilities, and with properly qualified teachers, it deserves the same recognition as other subjects pursued under similar conditions.

It will be noted that the committee recommends that some attention be given to commercial geography and industrial history in connection with the work in elementary political economy, and that these three subjects be taken as one.

This recommendation is made because the committee feels that such a subject as this may easily become merely formal in the actual instruction in the schools, and that it should receive a concrete treatment, which will be assured to a certain extent by linking it with the practical subjects having such an intimate relation to it as commercial geography and industrial history.

It appears to the committee that in a country like the United States, where all citizens are called upon to take sides in the discussion and decision of important economic questions, it is exceedingly desirable that the elements of economics should be included in the program of high schools for the sake of the pupils who may not go to college. And, following the general line of the recommendations of this report, it is urged that, when the subject is so taught as to secure adequate results for those who do not go to college, it will also be so taught as to entitle the pupil who pursues it to the privilege of offering it as one of his requirements for admission to college.

XIV. *Resolved*, That we recommend an increase in the school day in secondary schools, to permit a larger amount of study in school under supervision.

In presenting this resolution the committee is aware that there is a great divergence of custom in the length of the day in secondary schools, the number and length of recitation periods, the noon intermissions, and the time devoted sacredly to study within the schoolhouse. A few have two sessions, following the rule governing the elementary schools; some are from 8 A. M. to 1 P. M., and many from 9 A. M. to 2 P. M., with one-half hour at noon for a light lunch.

We appreciate the almost unanimous and perhaps enlightened opposition on the part of teachers to the proposition for a longer school day. The committee believes, however, that it is a subject for intelligent discussion, and that the weight of argument favors a longer day. The committee does not trace its convictions on this matter to the fact that the German secondary schools are one-half longer in session than our schools, and no hardship seems to result.

There is no disposition to imitate European methods because they are European, but we believe it is easily demonstrable that it is in the class recitation and under the inspiration and instruction of the teacher, and not in the study hours at home, that the pupil acquires the bulk of his scholastic knowledge.

A very large majority of the pupils who attend our secondary schools are of the middle class, a very respectable minority are of the poorer class, and only a small fraction are from the homes of the rich.

In the cities and large towns the school buildings offer better conveniences for study than the homes; pupils of immature age do not know how to study, and need the guidance and direction of an intelligent and interested teacher; lessons should be learned largely in school in the quietness of rooms thoroly equipped for that purpose, in the midst of reference-books, maps, charts, pictures, and all of the paraphernalia incident to study; recitation periods should not be less than fifty minutes, instead of forty, as prevails in too many schools; there must be time for drawing, physical culture, vocal music, and laboratory practice.

The committee, therefore, recommends that the secondary-school buildings be open for pupils from 8 A. M. until 4 P. M., and that all who find it more convenient and attractive be encouraged to occupy the rooms for reading and study, and that as many teachers as are necessary remain to assist these pupils in the prosecution of their work.

The practice in some schools of having two sessions a day, with a long intermission at noon, is to be deplored. The committee especially disapproves of the plan recommended by some with a view to economy, but which we think false economy, of having two sessions with different sets of pupils for morning and afternoon, whether taught by the same or different teachers at each session. This method will require all study, all preparation of lessons, to be done at home, without the conveniences, the equipment, the inspiration of the school itself. It will destroy, in a large

measure, the real function of the secondary school; it will lessen the interest of the pupils, and limit the influence of the teachers; it will separate children of the same families in the different years of the school; it will make the instruction less potent and the discipline more difficult; it will in every way tend to destroy the school as the real laboratory and workshop of the pupil.

NATIONAL UNITS, OR NORMS

The vocabulary of pedagogy is not as yet clearly differentiated in all of its branches, a fact which accounts for no little confusion in educational discussions. The words "curriculum" and "course of study," for example, are used synonymously to apply either to the entire range of subjects pursued in a school, to the schematic arrangement of those subjects for an individual student, or to the quantum of any given subject, as mathematics or history. So we have the expressions, "high-school course of study," "high-school curriculum," "high-school course," the "Greek course" and the "course in Greek" (which may designate either a special schematic arrangement for the whole work of a pupil taking Greek, or specific work in Greek itself), "Latin course" and "course in Latin," etc., thru all the subjects. It is difficult to avoid the confusion which this inaccurate use of language makes almost inevitable.

The committee, for itself, adopts a definite terminology which will be used during this discussion. Three distinct terms seem to be needed: (1) *program of studies*, which includes all of the studies offered in a given school; (2) *curriculum*, which means the group of studies schematically arranged for any pupil or set of pupils; (3) *course of study*, which means the quantity, quality, and method of the work in any given subject of instruction.

Thus the program of studies includes the curriculum, and may, indeed, furnish the material for the construction of an indefinite number of curriculums. The course of study is the unit, or element, from which both the program and the curriculum are constructed.

With the construction of a curriculum, or of several curriculums, this committee has not dealt. A very large number of such schematic plans are already in print. It is difficult to decide, upon general principles, why one is better than another, and still more difficult to formulate a new one which shall be better than any other; nor does it seem to the committee necessary or desirable that such a work should be undertaken. Individual differences of opinion among principals and teachers, as well as the influence of local conditions and surroundings, have always been reflected in school curriculums, and it seems necessary that they always should be. Absolute uniformity in our secondary education thruout the country, or thruout any considerable section of it, is so improbable that it is a waste of time to discuss the question as to whether it be desirable or not. The

committee believes it is not desirable, but it is also of the opinion that uniformity is possible, practicable, and desirable in certain features of secondary work, and that, therefore, the proper course to pursue is one that will leave sufficient scope for individuality, in the field where individuality rightly has most play. The committee aims to secure uniformity in that part of the field in which uniformity is most desirable. Using the terminology outlined in the above paragraph, there seems to be no need for uniformity in curriculums, and no possibility of it, but there does seem to be a great need for uniformity in courses of study, and no insurmountable obstacles to the securing of such uniformity are discoverable. The course of study is the unit out of which curriculums and programs are framed. It is with this unit that the work of the committee has been chiefly concerned.

Acting on these lines, the committee has devoted its chief energies, thru several years, to securing the formulation of satisfactory courses of study which should serve as units, or norms, worthy of national acceptance. The process of formulating these units has been outlined in the preceding sections of the report. The work, on the whole, represents the consensus of opinion of a very large body of the ablest experts in the country. The committee was obliged to rely upon the free co-operation of bodies of specialists for the work of laying out courses in the several subjects. Under such circumstances it was inevitable that there should be some differences in the thoroness and enthusiasm with which the work was performed. Had the committee been able to call together special bodies of scholars and schoolmen to represent each subject taught in secondary schools, a more complete and symmetrical report might have been presented. On the other hand, it would have been impossible for the committee, with the amplest financial resources, to have secured such expert work as is represented in some of the special reports submitted, notably those on Greek and Latin, modern languages, and history. On the whole, therefore, it was, perhaps, fortunate that the method of work pursued by the committee was forced upon it by circumstances. Each body of specialists was invited to outline an ideal and also a practical course of study in the special study it represented. These courses are printed, each under its appropriate head, in the department of special reports.

These courses of study constitute so many national norms, or units, out of which any school may make up as rich a program of studies as its means and facilities permit; a program, moreover, which may be made to yield several curriculums, or, possibly, almost as many curriculums as there are students, each curriculum perhaps being better than the others, from an individual point of view.

In so far as the courses of study representing national units, or norms, may be adopted by the schools and colleges, great simplification will

result in the subject of college-entrance requirements, the subject specifically referred to this committee. Hitherto there has existed the widest confusion in this matter, a confusion that has been more emphatic in some studies than in others, no doubt, and yet it has pertained to all of them. It has been owing largely to this confusion that the colleges have been unwilling to abandon entrance examinations. For instance, elementary German as prescribed for an entrance requirement meant nothing unless the ground covered were outlined with some minuteness in the college catalog; for what might constitute elementary German in one school might be a course of three periods a week for a year, in another five periods a week for a year, in another four periods a week for two years; in one school it might be pursued by the conversational or natural method, and in another by the grammatical method. The same, of course, is true of French. In history there has existed a great amount of confusion. There has also been lacking a general consensus of opinion as to what constituted proper work in science for entrance requirements to college. In the older studies, mathematics and the ancient classics, there has been less confusion, as they have had a longer time to crystallize into definite form; but the report on classics by the American Philological Association represents a very distinct and important advance in the organization of classical education in this country.

The fundamental problem in this connection, in the minds of the committee at least, is to formulate courses of study in each of the several subjects of the curriculum which shall be substantially equal in value, the measure of value being both quantity and quality of work done. This idea has been kept firmly in mind by all the special committees, as is evinced by the fact that the courses of study outlined by these committees make no great or unusual demands upon the schools, and are evidently, at a first glance, in a general way, substantially equivalent. If schools and colleges were able, generally, to accept these courses, the statement of entrance requirements would be extremely simple and perfectly intelligible. That such a general acceptance of these courses may not unreasonably be anticipated is shown from the experience with the English requirements for college entrance, which have within a few years, without any external pressure and authority, become practically uniform thruout the country, simply by reason of the formulation by a reputable body of experts of a definite course of work. It is not to be expected, nor is it desired, that all colleges should make the same entrance requirements, nor is it to be expected that all schools will have the same program of studies. What is to be desired, and what the committee hopes may become true, is that the colleges will state their entrance requirements in terms of national units, or norms, and that the schools will build up their program of studies out of the units furnished by these separate courses of study. A college may recognize more or fewer of these units, but

where it recognizes a subject at all, it is to be hoped that it will recognize it in the shape of the national unit. So, probably, very few schools will be able or desire to offer all of the units, but out of the total number of units outlined any school should be able to build up a satisfactory program from which all necessary curriculums could be extracted.

Notwithstanding the care with which these courses of study representing different units, or norms, have been formulated, it cannot be expected that they will meet with universal acceptance. In many matters of detail they are bound to be criticised; but the committee earnestly expresses the hope that where individual preferences differ in minor details from the statements made in the special reports and the principles outlined in the report of the committee as a whole, these individual preferences will be subordinated for the sake of the general good. The reports of the committees represent a large consensus of expert opinion, and as such should be entitled to weight and consideration. They are entitled also to the advantage of the doubt, where any individual questions as to whether the views expressed are sound on a given point. The opinion is held by good thinkers that we are living in an age of excessive individualism. It is certainly true that the educational system of the country has suffered, and still suffers, from the great opportunity afforded by our system for the play of individual idiosyncrasies. It is quite true, on the other hand, that education, as a whole, has gained vastly from the freedom offered to individual initiative; but on certain measures of national bearing the time has come to subordinate some personal preferences in order to reach an agreement which shall make for the public good. Such an agreement does not mean the abandonment or sacrifice of a principle, but it may involve the non-insistence on carrying the principle into immediate practice. In the curriculums large and, it would seem, ample scope is still left for the play of individuality. The committee distinctly refrains from entering upon the task of constructing curriculums to be imposed, for the sake of uniformity, upon the schools of the country. Such uniformity is not needed; but uniformity in courses of study which shall lead to the establishment of national units, or norms, does seem to be of so great importance that both colleges and secondary schools may fairly be expected to yield, to a large extent, individual opinions which interfere with its establishment. While the committee is unanimous in this opinion, it feels that the opinion would still be of little value but for the fact that in the course of four years' work upon this problem it has become convinced that there is a widespread sentiment among thoughtful educators of the country which demands such action. In formulating these courses of study, these units, or norms, and presenting them to the public, the committee does not, therefore, feel that it is leading the way into a new and untried field, making suggestions which may come

to fruition in after-years, but that it is formulating, crystallizing, putting into definite shape beliefs and sentiments that have already taken hold upon the educational public. Legislation is largely the official recognition of existing facts or sentiments. The committee in this work feels that it is acting more in a legislative than in a pioneer capacity.

RESOLUTIONS OF THANKS

Resolved, That the conference desires to express its hearty thanks to all who have contributed to the success of the meeting; to President Harper for his cordial welcome and interest in the prosecution of its work; to the university for opening wide its doors and extending all its privileges; to Dr. William Gardner Hale for his special hospitality; to many other professors of the university for generous entertainment; and especially to the officers and members of the Quadrangle Club for the free use of their rooms and many other courtesies that have facilitated the work of the conference, and contributed greatly to the pleasure of its individual members; and to the Chicago press for the unusual pains taken to give full and impartial reports of its proceedings.

Resolved, That the hearty thanks of the committee are due, and are hereby extended, to the American Philological Association, the Modern Language Association of America, the American Historical Association, the western branch of the American Mathematical Association, and the Natural Science Department of the National Educational Association, for the great interest they have taken in our work, for the valuable services they have rendered in furnishing reports and other manuscript material for our use in preparing our report. Also to Professor Alexander Smith and Dr. John M. Coulter, of the University of Chicago, and Mr. Charles W. French, of the Hyde Park High School, of Chicago, for assistance similar in kind, and for the information and counsel they have so kindly furnished the committee since our session began.

Resolved, That the committee heartily appreciates the sustained interest of its chairman, and realizes that what measure of success it has attained is largely due to his indefatigable labors toward securing material from experts for the consideration of the committee.

RESOLUTIONS DEFINING DUTIES OF EDITORIAL COMMITTEE AND APPOINTING SAME

Resolved, That the chairman, Mr. Nightingale, together with Professors James and Thurber, be constituted a committee to prepare for publication the final report of the joint committee, and to carry it thru the press.

Resolved, That this committee of three has permission and authority to call upon the individual members of the joint committee for such facts and views as in their judgment may be necessary in preparing the report.

Resolved, That the report, when in type, be sent to all members of the general committee, in proof sheets, for their suggestions and criticisms, with the understanding that the committee of three shall be the final authority as to the admissibility of such suggestions and criticisms into the report as finally published.

Resolved, That when in the opinion of this committee of three such suggestions an criticisms cannot be properly admitted into the report, their authors shall have liberty to express them in dissenting special reports over their names.

Resolved, That it is not desirable that such dissenting reports shall be insisted upon except in the cases of serious divergency of views, of which the authors themselves shall be the sole judges.

It will be seen, by reference to the resolutions constituting and instructing the editorial committee of three, that the general committee

thought it desirable to avoid, as far as possible, divergent views and dissenting opinions in the final report, and to secure the largest possible consensus of opinion consistent with the truth. This instruction has been carried out in its spirit. While the names of all the committee are signed to the report, and there are no dissenting reports, it is not to be supposed that the members of the committee all indorse every view and opinion that the report contains.

CONCLUSION

Upon several subjects of great importance this report is silent, much to the regret of the committee. These omissions and deficiencies must be regarded as due to the conditions under which the committee has worked, and not at all to any feeling on the part of the committee that these subjects are of relatively small importance. That courses of study have not been prepared in geology, astronomy, and physiology — subjects which play an important part in secondary courses, and which are, to some extent at least, recognized for entrance to college — is perhaps the most important omission. The committee is bound to state, in justification of its own action, that, in accepting the proffered aid of the Department of Science of the National Educational Association, it depended upon the department for detailed reports upon courses of study in the several sciences taught in secondary schools, in the same way that it depended upon the Philological, the Historical, and the Modern Language Associations for detailed reports in their several branches of instruction. These reports were not forthcoming on the subjects of astronomy, geology, and physiology. In the three-days' session held by the committee it was quite impracticable to secure any reports that would have weight and value. The detailed consideration of these subjects is, therefore, reluctantly omitted from this report. But the committee would call attention to the fact that the general principles laid down in the report as a whole apply quite as thoroly to the branches just enumerated as to all the others for which detailed courses of study have been submitted. It might be helpful to the schools if carefully planned courses of study in astronomy, geology, and physiology could be presented in this document, but the general principles upon which such courses should be constructed and administered, in order that they may be received for college entrance, have been fully elucidated in connection with the other subjects of instruction and in the general resolutions adopted by the committee. So far, therefore, as the specific work of this committee is concerned in determining the principles to be followed in adjusting secondary courses to meet college-entrance requirements, and *vice versa*, it cannot be held that any subject has been slighted, for the fundamental work of the committee has been a formulation of principles that are equally applicable to all subjects of instruction.

Since the work of the committee is concerned in large part with the courses of study in secondary schools, it would, no doubt, have been desirable that the subject of commercial instruction should have been taken into consideration. What relation commercial studies shall have to other studies in the program, and whether any commercial studies, such as history of industries, history of commerce, and commercial geography, should be recognized for admission to college, are questions that will soon have immediate practical importance. The whole subject of commercial education in secondary schools seems to the committee one deserving of special study — one, indeed, for the consideration of which a special committee might well be appointed. Nor is the committee unmindful of the fact that it has not carried out that part of its self-adopted program of work which committed it to an investigation of the best methods of admission to college, whether by examination or by some form of certification. This question, however, seems not so fundamental as those to which the committee has advocated its labors. Still it would, no doubt, be desirable to have an adequate study made of this matter in all of its phases and bearings. The time and resources at the disposal of the committee, however, were not adequate for accomplishing more than is herewith presented.

When it is remembered that the investigations carried on by the committee itself and those carried on at its suggestion, the results of which are herewith presented, have all been completed under a single appropriation, from the National Educational Association, of $500 — an appropriation, moreover, which did not become available until the present year — it will be obvious at once that the committee has been favored by the generous and self-sacrificing assistance of many collaborators. A large number of educators, including those whose names are signed to the various special reports, and many others as well, have given generously of time, and also of money, to further the work of this committee. The cordial and enthusiastic support accorded to this investigation from the outset has been an unfailing source of inspiration to the members of the committee themselves, and a sure sign of the importance ascribed to the relations of high schools and colleges as a factor in the development of our higher education. The officers of the National Educational Association have given their cordial support to the work of the committee at every stage of its progress. The committee now submits its report, with the most cordial appreciation of the generous aid it has thus far received, with a conviction of the importance of the subject discussed, that has grown more intense with every additional day of labor given to the report, and with no feeling that the work intrusted to the committee has been finally and forever accomplished, but in the hope that an important contribution has been made to the adjustment of the vexed relations between secondary and higher education, and with confident expectation

that the report thus submitted will receive the careful study and, so far as may be justified, the approval and adoption of those who direct the higher education of this country.

A. F. NIGHTINGALE, *Chairman*,
Superintendent of High Schools, Chicago, Ill.

W. H. SMILEY, *Secretary*,
Principal of High School, District No. 1, Denver, Colo.

GEORGE B. AITON,
State Inspector of High Schools, Minneapolis, Minn.

J. REMSEN BISHOP,
Principal, Walnut Hills High School, Cincinnati, O.

JOHN T. BUCHANAN,
Principal of Boys' High School, New York, N. Y.

HENRY B. FINE,
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PAUL H. HANUS,
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BURKE A. HINSDALE,
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EDMUND J. JAMES,
Professor of Public Administration, University of Chicago, Chicago, Ill.

WILLIAM CAREY JONES,
Professor of Jurisprudence, University of California, Berkeley, Cal.

JAMES E. RUSSELL,
Dean of the Teachers' College, Columbia University New York, N. Y.

CHARLES H. THURBER,
Associate Professor of Pedagogy, University of Chicago, Chicago, Ill.

PART II

SPECIAL REPORTS*

REPORT OF THE COMMITTEE OF TWELVE OF THE AMERICAN PHILOLOGICAL ASSOCIATION ON COURSES OF STUDY IN LATIN AND GREEK FOR SECONDARY SCHOOLS†

INTRODUCTION

I. THE WORK OF THE COMMITTEE OF TWELVE

The Committee of Twelve of the American Philological Association was appointed at a special session held in Philadelphia in December, 1894. It was instructed to bring to the attention of those who were interested in the subject a resolution, which the association had unanimously passed, that "in any program designed to prepare students for the classical course not less than three years of Greek should be required." The same committee was afterward requested to take into consideration also "the question of the amount of Latin needed for the various courses in secondary schools."[1]

* The special reports that follow were prepared by committees, appointed by the different associations which they represent, at the request of the Committee of the National Educational Association on College-Entrance Requirements. They call for careful study and the most earnest consideration, and can but be regarded as the most valuable contributions to secondary education which have ever been published.

The model courses of study presented are commended by the committee, altho it was not within the limits of its labor to verify all the statistics which will be found interesting, nor does it comment on the inferences drawn. These reports have been written after an amount of correspondence and investigation which can scarcely be estimated, and he large expense incurred has been borne by the associations calling them forth. We believe they will be of incalculable value to the better class of secondary schools thruout the country. A. F. NIGHTINGALE, *Chairman.*

† The Committee of Twelve desires to express its sense of obligation to the twelve hundred teachers who have aided it by generously imparting information and counsel. The heaviest burdens of the committee have been borne by Professor Hale, of the University of Chicago; Professor Kelsey, of the University of Michigan; Professor West, of Princeton University; and the chairman, Professor Seymour, of Yale University. Special recognition is due to the courtesy of the United States Commissioner of Education, Hon. W. T. Harris, who caused the preparation of the important table in Appendix B and furnished the data for Appendix C.

[1] *Proceedings of the American Philological Association*, Special Session, 1894, p. xxviii.

In accordance with these instructions, in the spring of 1895 the committee prepared an address on the study of Greek, which was approved at the next session of the association and was extensively circulated.[1] At the meeting of the National Educational Association in July of the same year a copy of this address was laid before the Department of Secondary Education, which received it cordially and gave it a place in the minutes of the meeting.[2]

In the spring of 1896 the committee prepared a report on the amount of time that should be allotted to Latin in school programs. This report was not only submitted to the American Philological Association, but was also, in accordance with a suggestion made by several members of the National Educational Association, presented at Buffalo in July to the joint session of the Departments of Higher and of Secondary Education, which expressed hearty approval of it by a unanimous vote, and ordered it printed in the minutes.[3]

At this time the National Educational Association was undertaking a comprehensive study of school programs in their relation to college-entrance requirements. At the Denver meeting a joint committee, composed of prominent members of the Departments of Higher and of Secondary Education, had been appointed, with instructions to report on the whole subject of entrance requirements the following year. This committee first made an extensive investigation of existing conditions,[4] and then proceeded to formulate a plan of work. Having reached the conclusion that the problem of securing uniform entrance requirements can be solved only thru the attainment of greater uniformity in courses of study, the joint committee voted, as a part of its scheme, to invite certain scientific societies to render expert assistance in forming model programs which might be adopted by high schools, academies, and private schools in all parts of the country. The plan of work elaborated by this committee, including a proposition to invite the co-operation of the American Philological Association, was laid before the joint session of the Departments of Higher and of Secondary Education at Buffalo, and was adopted without modification.[5] The secretary of the joint committee at once sent a telegram to the American Philological Association, which was then in session at Providence, inviting it "to prepare at its convenience a report on the proper course of secondary instruction in Latin and

1 *Proceedings* for July, 1895, pp. xxxii–xxxviii.

2 *Journal of Proceedings and Addresses of the National Educational Association*, 1895, pp. 581, 632–5; *School Review* for June, 1895, pp. 434–41.

3 *Proceedings and Addresses of the National Educational Association*, 1896, pp. 559–62; *Proceedings of the American Philological Association* for July, 1896, pp. li–lv. The report was published also in the *School Review* for June, 1896, pp. 472–4; the New York *Evening Post* for July 11, 1896; and *Book Reviews* for August, 1896, pp. 101–3.

4 See the *School Review* for June, 1896.

5 *Proceedings and Addresses of the National Educational Association*, 1896, pp. 558–9; *School Review* for June, 1898, p. 443.

Greek." The American Philological Association accepted the invitation and instructed its Committee of Twelve to draw up courses of study in the two languages as requested.[1]

The Committee of Twelve took up promptly the important work that had been assigned to it, and, after some preliminary correspondence, met in New York in December, 1896. It voted to send a circular of inquiry to teachers in all parts of the United States, requesting information regarding the present condition of the study of the classics, and suggestions in relation to classical programs. It decided also to invite representative men engaged in the work of secondary education, scholars of undoubted pedagogic ability and experience, to co-operate with it, as auxiliary committees for Latin and for Greek, and to hold a meeting of the combined committees in the spring vacation of 1897.[2]

More than six thousand copies of the circular of inquiry were sent out to teachers of Latin and Greek, to superintendents, to principals of schools, and to others who are prominent in educational work. About one thousand replies were received, and thus there was placed in the hands of the committee a mass of material for consideration — exact information, and the opinions of specialists — such as had never before been gathered in relation to this subject. Great and general interest in the undertaking was evinced by the care with which most of the answers to the questions of the circular had been prepared. The replies were carefully tabulated by Dr. Arthur Fairbanks, of Yale University, and were brought before the committee at the meeting in New York, April 14.[3] The Committee of Twelve was in session with its auxiliary committees for two days. After listening to a statement with regard to the answers to its inquiries, and to a discussion of certain fundamental questions connected with secondary instruction in the classics, the combined committees divided into two sections for the preparation of school programs for Greek and for Latin. In the time at their disposal the committees were able only to draft tentatively a four-year Latin course and a three-year Greek course; the whole matter of five-year and six-year Latin courses was referred to a special subcommittee, which met in Chicago in May.

As a result of these labors, in the fall of 1897, the Committee of Twelve issued a preliminary report, which contained a brief statement in regard to the organization of the committee and the purpose of its work, and presented for criticism the tentative courses that had been drawn up — four-year, five-year, and six-year courses in Latin, and a three-year course in Greek.[4] This preliminary report was submitted to the principal educational associations of the country, and copies were sent also to a number

[1] *Proceedings of the American Philological Association* for July, 1896, p. lx.

[2] *Ibid.*, July, 1897, p. xxviii.

[3] See the *School Review* for June, 1897, pp. 350–59.

[4] Published also (in essentially the same form) in the *School Review* for June, 1897, pp. 362–6; *Proceedings of the American Philological Association* for July, 1897, pp. xxxi–xxxiv.

of educational experts; many kindly and helpful suggestions were received, and it became evident that the tentative programs, with slight modifications, would give as general satisfaction as any courses of study which the committee could devise.

Notwithstanding the favorable reception of this report, the Committee of Twelve resolved again to avail itself of the advice and criticism of those who are actually engaged in the work of classical instruction in secondary schools, before issuing its report in final form. A meeting of the combined committees was appointed to be held at Ann Arbor, Mich., in the spring vacation of 1898, and in order to attract a number of classical teachers, with whom the problems under consideration could be discussed face to face, a classical conference was arranged, with a two-days' program of scientific and pedagogical papers.

The meetings opened with a session of the Latin section of the combined committees, on March 30; the conference was held on March 31 and April 1, and the Committee of Twelve met for its final session on April 2. The attendance at the classical conference was full and representative,[1] while at the sessions of the committee officers and representative members were present, by invitation, from the more important educational associations of the East, the South, and the West, whose direct testimony gave a deeper insight into the conditions of classical study, in all parts of the country, than could have been gained from correspondence alone. Before adjourning, the Committee of Twelve voted that the publication of the courses of study, to the formulation of which so much time and effort had been given, should be accompanied by a statement of the reasons which had influenced its conclusions.

From what has been said it will be evident that this report was not prepared hastily by a committee anxious to avoid the consideration of burdensome details, and that it is not based primarily on theoretical considerations. It embodies conclusions reached after painstaking inquiry into actual conditions, as well as the results of mature and intelligent experience on the part of the advisers of the committee; and it was drawn up after full consideration of the difficulties that lie along the path of educational advance in the secondary field.

The committee is firmly of the opinion that the work outlined in the classical programs here offered lies within the range of accomplishment of any school which has a competent classical teacher, and that there is no reason why at least the four-year Latin course and the three-year Greek course may not be generally adopted as a standard of classical work in the schools of the North, the South, the East, and the West.

II. PRELIMINARY OBSERVATIONS REGARDING THE REPORT

The investigations pursued by the committee show that a tendency exists in many places to increase the amount of time allowed to Latin in

[1] See the *School Review* for June, 1898, pp. 425, 481.

school programs, and that there is nowhere a movement in the other direction. The reports of the United States Commissioner of Education for the last nine years also reveal the highly encouraging fact that *the increase of enrollment of pupils in Latin in our secondary schools is very large, and is relatively greater than the increase in any other study.*[1] Nearly 175,000 more pupils were studying Latin in 1897–98 than in 1889–90. The increase of pupils in Greek, while not so marked, is likewise distinctly encouraging. Nearly 25,000 were reported as studying Greek in preparatory courses in 1897–98, against about 13,000 eight years earlier. This increase is not confined to any one section of the country, as may be seen from the map on p. 706, which shows the distribution of Greek and Latin students in the secondary schools in 1890 and in 1898.

Then, too, substantial progress has been made in the proper training of teachers. We are undoubtedly still far from having attained a proper professional standard; but, on the other hand, the facilities for training classical teachers are being constantly, even if somewhat irregularly, developed. It is now possible, as it was not twenty years ago, to find a fair number of well-equipped university courses devoted, at least in part, to the special training of capable instructors for our high schools and academies. There is also a distinct tendency to adapt text-books, in both Latin and Greek, to the pedagogical needs of pupils and teachers, and to emphasize the humanistic, as opposed to the pedantic, ideal of classical culture. The existence of all these favorable tendencies at the present time seems to indicate that we are entering upon a better age for the school study of the classics. A situation so hopeful as this naturally makes the necessity of giving organic unity to the increasing body of classical interests more pressing than ever before.

The committee is the more encouraged in proposing the courses of study submitted in this report, because it has made a careful investigation of the classical instruction in about a thousand high schools and academies, and has had associated with it, in all its conferences, representative schoolmen from the chief regions of our country where the classics are taught. On the basis of information thus obtained as to the actual condition of the teaching of Latin and Greek, and the resources and legitimate expectations of the secondary schools, the committee has been enabled to test in advance, so to speak, the practicability of the plans here presented. It is gratifying to be able to state that these plans are not based on a compromise of conflicting interests, but that, both in the judgment of the committee and in that of the auxiliary committees, composed of representative teachers of Latin and Greek, the courses present a rational and practical standard, containing all the essentials in a sufficiently uniform relation, and yet affording a flexibility sufficient to allow for all reasonable diversity in different classes of schools in different parts of the land.

[1] See Appendix B at the end of this report.

The plans involve no radical reconstruction, but aim to bring the actually existing practices of our schools into organic unity thru gradual adaptation to a more consistent standard.

The problem encountered in dealing with the question of instruction in Latin in our American high schools, academies, and other secondary schools, while similar to the corresponding problem for Greek, is more complicated. It is similar, because the principles which regulate the introduction of young students to both languages have long been recognized as practically identical. *Utrique eadem via est*, the maxim of Quintilian, might be taken without modification as summing up the settled belief of the best teachers of our own century with reference both to the unity of the classics as a field of study and to the unity of method to be pursued in teaching the two classical languages. The problem is more complicated, because Latin is taught in a far larger number of schools than Greek, because many schools have more than one course in Latin instead of a single course as in Greek, and lastly because the length of time devoted to Latin varies more than the length of time devoted to Greek.

But another, and far more serious, cause of complication lies outside the relation of the two languages to each other, and is, in fact, a difficulty which underlies our secondary education generally, so far as concerns the drawing up of programs of study; that is, the lack of uniformity in courses of study in high schools and academies, with its concomitant, the lack of uniformity in college standards of entrance. If, as we believe, the need of greater uniformity is urgent in order to enable our secondary education to accomplish its proper ends, then in no part of the field is it more conspicuously urgent than in the framing of programs of study. For unless school programs can in some rational way be so brought into harmony that classical courses, for example, so far as equal amounts of time are allotted to them, shall mean substantially the same thing in all parts of the country, we cannot expect to remedy the existing inequalities and stop the waste of time and energy in our school instruction, or to adjust the equally irrational inequalities of our college-entrance requirements in the same field. If, on the other hand, school programs in Latin and Greek can be made substantially uniform, the schools themselves will be greatly helped, and a long step will have been taken toward the solution of a question which has deeply vexed the colleges.

In the case of the classics, as in the case of other studies, the desired remedy is not to be sought in any attempt to bring all the schools to the adoption of a single inflexible program. Such uniformity would be both impracticable and in itself undesirable. Neither is it desirable that the various regions of the country should each make an independent program. There is already too much of such diversity, which tends to stereotype and perpetuate causes of division and hindrance, to provincialize rather than to nationalize our teaching. The committee recognizes, of

course, that local differences in the Latin and Greek courses will always exist, and that many of these differences are inevitable under any plan that may be proposed. Many of them are, indeed, made reasonable by local conditions. The committee was not directed to prepare a plan which could be carried out at once in every school, but the best program which is practicable for the schools of the country under prevailing conditions—for public high schools, as well as for endowed academies and private "fitting schools." The precise amount of time that a school can allow for Latin and Greek determines much, and this amount is sure to vary. Even more is determined by the strength and skill of the teaching force. Legitimate differences of opinion must also exist with reference to the order in which the several authors may best be taken up, and the precise amount of each that shall be read. Still other causes of variation will occur to those who are actually engaged in the work of teaching, and allowance must be made for such causes in any proposal designed to secure general assent. But after all concessions have been made to the inevitable diversity that arises from differences of locality and of methods, there still remain other differences which need elimination, or at least reduction to some common standard of variation, if any permanent success is to attend the present hopeful movement toward uniformity.

It is, indeed, fortunate for the cause of classical studies at the present time that the schools and colleges are already generally agreed as to the importance of greater organic unity in the courses of our preparatory schools. The present decade has witnessed far more extensive and intelligent discussion and conference looking toward the accomplishment of this result than has ever before been known in our country.

In offering the fruits of its labors to the two educational bodies under which it has been working, the Committee of Twelve desires to make grateful acknowledgment of the invaluable assistance which it has received from the members of its auxiliary committees and from other educational workers, who have freely responded to every request for information and counsel; and it wishes further to express the hope that this report may contribute in some measure to the unification and advancement of our secondary instruction in Greek and Latin.

III. THE CONSTITUTION OF THE COMMITTEE OF TWELVE AND OF THE AUXILIARY COMMITTEES

THE COMMITTEE OF TWELVE

Thomas Day Seymour, professor of Greek, Yale University, *chairman.*

Cecil F. P. Bancroft, principal of Phillips Andover Academy.

Franklin Carter, president of Williams College.

William Gardner Hale, professor of Latin, University of Chicago.

William R. Harper, president of the University of Chicago.
Francis W. Kelsey, professor of Latin, University of Michigan.
Abby Leach, professor of Greek, Vassar College.
Charles Forster Smith, professor of Greek, University of Wisconsin.
Clement L. Smith, professor of Latin, Harvard University.
Herbert Weir Smyth, professor of Greek, Bryn Mawr College.
Minton Warren, professor of Latin, Johns Hopkins University.
Andrew F. West, professor of Latin, Princeton University.

THE AUXILIARY COMMITTEES

THE LATIN AUXILIARY COMMITTEE

George B. Aiton, inspector of state high schools, Minneapolis, Minn.
J. Remsen Bishop, Walnut Hill High School, Cincinnati, O.
David Y. Comstock, principal of St. Johnsbury Academy, St. Johnsbury, Vt.
E. W. Coy, principal of the Hughes High School, Cincinnati, O.
Lawrence C. Hull, Lawrenceville School, Lawrenceville, N. J.
Richard A. Minckwitz, Kansas City High School, Kansas City, Mo.
Oscar D. Robinson, principal of the Albany High School, Albany, N. Y.
Charles H. Thurber, dean of Morgan Park Academy, Morgan Park, Ill.
A. W. Tressler, principal of the High School, Ripon, Wis.
W. R. Webb, principal of Webb School, Bell Buckle, Tenn.

THE GREEK AUXILIARY COMMITTEE

Edward B. Clapp, professor of Greek, University of California, Berkeley, Cal.
E. G. Coy, principal of the Hotchkiss School, Lakeville, Conn.
J. G. Croswell, principal of the Brearley School, New York city.
William Gallagher, principal of the Thayer Academy, South Braintree, Mass.
Robert P. Keep, principal of the Free Academy, Norwich, Conn.
C. A. Mitchell, classical master of the University School, Cleveland, O.
W. D. Mooney, principal of the Mooney School, Franklin, Tenn.
J. H. Pratt, principal of the Milwaukee Academy, Milwaukee, Wis.
Julius Sachs, principal of the Collegiate School, W. Fifty-ninth street, New York city.
H. G. Sherrard, classical master of the High School, Detroit, Mich.

GREEK COURSES IN SECONDARY SCHOOLS

The preparation of the Greek programs presented to the committee a simple problem, in view of the limited time which can be given in the schools to the reading of Greek literature, and of the small amount of Greek literature which is suitable for classes of beginners. The problem had been still further simplified by the discussions and actions of recent conferences, particularly the Greek conference of the Committee of Ten, the Commission of New England Colleges, and the Greek conference held at Columbia University in the spring of 1896 — all of these being in substantial agreement, and already approved by many of the most able teachers of the country. The replies to the committee's circular of inquiry gave abundant information, both as to what is actually done in our schools, and as to what is desired. From California, Wisconsin, and

Tennessee, in particular, had come letters which presented a most hopeful view of the position of the classics in the schools, and urged that the committee should yield to no suggestion of a weaker, less exacting course of preparation for college. The committee is unanimous in reaffirming the position taken by the Greek conference of the Committee of Ten, and proposes a program which is in essential agreement with those of the Commission of New England Colleges and the Columbia Conference of 1896.

The committee recommends that three years be devoted to the study of Greek in secondary schools, with the understanding that the year consists of not less than thirty-eight weeks of school work, and that five periods of recitation a week, of not less than forty-five minutes each, be given to this study. In some parts of the United States work is crowded into two years, to which, in other parts, three years are devoted. Under exceptional circumstances, with earnest scholars and skillful teachers and long school years, the work of preparation for college in Greek may be done well in two years; but in general, with less earnestness and skill, this work is likely to be superficial if it is so hurried, and the Committee of Twelve still (and more earnestly than ever) urges the maintenance of a three-year preparatory course in Greek.

The committee further recommends heartily a thoro and methodical study of Greek grammar as the necessary basis of accurate reading. No one proposes to return to the former practice of committing to memory all of the rules of Greek grammar before applying them in reading; but pupils cannot be expected to prove fair scholars unless they know Greek forms and the elements of Greek syntax well before they are sent to college. Moreover, a vigorous and continued effort should be made to correlate and arrange the isolated grammatical facts in the pupil's mind. Our Greek grammars aim to be scientific, and their arrangement should be well understood by the pupil, in order that he may know where to look for the information which he needs. The teacher is in danger of forgetting that the pupil does not easily obtain the general view of the field of grammatical study with which he is himself familiar, and that it is this knowledge alone which enables the beginner to put into their right relations the grammatical facts which he learns. For instance, the pupil should know the most important syntactical uses of each case — understanding that the genitive has accepted the work of the ablative in addition to its own, and the dative that of the instrumental and the locative. The correspondence between the constructions of conditional and relative sentences should be clearly apprehended. Altho the "analysis" of the verbal forms is no longer required so strictly as it was a quarter of a century ago, the pupil may well be taught the elements of word-formation and inflection.

The committee further recommends that, from the beginning,

systematic instruction be given in Greek composition, and that exercises in writing Greek, based upon connected reading in Greek prose, be continued thru the third year. Elementary Greek composition, which alone is attempted in the schools of America, is an indispensable auxiliary to, and we may almost say a part of, grammatical study. The teacher does not expect to train his pupil to vie with Xenophon as a Greek writer; he is entirely satisfied if his pupil can read Greek. Composition should not, therefore, be considered as taking time from reading, but as preparing the pupil to read more readily and accurately. It fixes the pupil's vocabulary more firmly in his mind, serves as a constant review of Greek forms, quickens his sensitiveness to the peculiar significance of the order of words in the Greek prose sentence, and to the difference of meaning between similar words and constructions. It is useful also as a check to the carelessness into which many pupils are in danger of falling, if (as is well) they read large quantities of Greek cursorily "at sight." For accurate scholarship in Greek we know no better training than many and carefully corrected exercises in Greek composition. These exercises should not be postponed to a late part of the course, but should be begun at the outset, when they will materially assist the pupil in mastering the forms, make his knowledge of constructions exact, cause him to observe Greek usage, and help him to feel the accuracy and force with which the Greek language can express thought. If they are neglected during any part of the reading course, to be resumed only a short time before the pupil leaves the secondary school, the subject is likely to become distasteful, because unwonted and difficult to the pupil, who will have been deprived of the aid which he should have received from the exercise during his entire course.

The continuance of exercises in Greek composition during the third year, while most of the time of instruction is given to Homer, is particularly important. This has been proved to be the best means of preserving the familiarity with Attic forms and constructions which is essential for satisfactory work in the college course, in the reading of Plato, Demosthenes, Sophocles, Euripides, etc.

In the hands of a skillful teacher, the most efficient exercises in Greek composition are in retroversion, that is, the re-turning into Greek of the English of some Attic prose which has been read by the student. If the teacher has not the time to prepare such exercises for his class, several text-books are ready to render this service. Certain advantages, however, are possessed by the systematic presentation of Greek constructions, in books which are prepared with no reference to a special text. A combination of the two methods is desirable wherever practicable.

In this country, teachers are in little danger of going to excess in attending to the niceties of Greek composition. The making of Greek

iambic and lyric verse, which has been practiced in England, quickens the æsthetic and literary sensibilities, but is useful chiefly for those who have time for advanced scholarship. The criticisms which have been uttered against such composition of verses do not hold against the composition of simple Attic prose which is here recommended.

The committee further recommends that exercises in the reading of unprepared passages (commonly known as sight reading) be begun at the outset of the Greek course and be continued thru it. Exercises in the reading of unprepared passages of Greek enable the teacher to discern, and so to meet, the pupil's difficulties in the interpretation of a new sentence. Very many freshmen seem to have pursued a wrong method of seeking to gain the understanding of a Greek sentence which a little reading of unprepared passages in the class-room would enable the teacher to detect, and perhaps to remedy. If the pupil comes to the teacher only with work carefully prepared with the aid of lexicon and commentary, the teacher may not discover some of the pupil's weaknesses, and may not understand his difficulties. These exercises also give the pupil readiness in translation and a feeling of mastery over the newly acquired language. Rapid reading, as well as exact interpretation, is necessary to true scholarship.

The practice of reading Greek aloud with intelligent expression is warmly recommended by the committee. This aids materially in the treatment of Greek as a living language, and, so far as the acquisition of forms and vocabulary is concerned, the voice is as important for the teachers of Greek and Latin as for those of German and French. Careful attention should be paid to the quantity of the syllables, since the rhythm, not only of the poets, but also of the great orators, was based upon this quantity.

In the Greek preparatory course small opportunity can arise for question as to what shall be read, and in what order. Altho Xenophon's style is now known to be not absolutely pure Attic, yet no Greek reading better than the *Anabasis* has been found for the second year of the Greek course. Some teachers, however, may prefer to read only two books of the *Anabasis*, and make up from other works of Xenophon, or from other authors, the equivalent of the third and fourth books of the *Anabasis*.

In order to secure a much-desired uniformity, colleges have been requested by several commissions and associations to base their examinations in Greek grammar and composition (in distinction from the ability to read Greek and translate it) on the first two books of the *Anabasis*.

The committee, finally, recommends that Homer be read in the last year of the preparatory course. From one point of view the pupil ought to continue the study of Attic prose without interruption during the third year of his Greek course, without being introduced to another Greek dialect. But for the sake of those students who take Greek in the

secondary school, but do not go to college, and as an inspiration to the scholars who are at an age to be thoroly interested in the Homeric poems, the teachers of secondary schools are almost unanimous in their desire that the third year of the three-year Greek course should be given mainly to Homer. The best pupils feel Homer to be *literature*, and so get an enticing foretaste of what awaits them in the reading of the college course. Some teachers prefer to begin Homer with the reading of the early books of the *Iliad;* others prefer the *Odyssey;* others would read the *Iliad* one year and the *Odyssey* another. Most colleges allow an option between equivalents, in order to give the fullest freedom to the secondary schools.

COURSE OF STUDY RECOMMENDED IN GREEK

(*Five periods weekly thruout the three years*)

FIRST YEAR

First and second terms: Introductory lessons.

Third term: Xenophon's *Anabasis* (twenty to thirty pages).
Practice in reading at sight and in writing Greek.
Systematic study of grammar begun.

SECOND YEAR

Xenophon's *Anabasis* (continued), either alone or with other Attic prose (seventy-five to one hundred and twenty pages).

Practice in reading at sight, systematic study of grammar, thoro grammatical review, and practice in writing Greek, both based on the study of Books I and II of the *Anabasis*.

THIRD YEAR

Homer (twenty-five hundred to four thousand lines); e. g., *Iliad*, I–III (omitting II, 494–end), and VI–VIII.

Attic prose (twenty-five to forty pages), with practice in writing Greek; grammar; practice in reading at sight.

NOTE.— If preparation for an advanced examination in Greek composition is not desired, the course may be reduced by one lesson a week the first year.

LATIN COURSES IN SECONDARY SCHOOLS

The determining factor in constructing a course in Latin in any of our high schools, academies, or private schools is practically the amount of time which can be allowed to that study, in view of the claims of other studies and the length of the school course. The ordinary arrangement is that of the four-year course of five exercises weekly. The average age of pupils at the beginning of the course is between fourteen and fifteen years. This four-year course is commonly the standard in our high schools and academies. There are schools, however, which are unable to allow four years to Latin, and these, as a rule, provide a three-year course. In a considerable number of schools, on the other hand, a five-year or a six-year course is to be found. The tendency to lengthen the Latin course beyond four years is clearly becoming stronger. This

tendency did not receive its initial impulse from the colleges and universities, but manifests rather the characteristics of a spontaneous movement on the part of principals and teachers in secondary schools. It had its origin in a growing conviction that the ends of education, at least in the earlier stages, are best subserved by the concentration of effort upon a limited number of leading studies, properly correlated, rather than by the scattering of energies over an indefinite range of loosely related subjects. The lengthening of the Latin course is being accomplished, however, not by keeping the pupil at school longer, but by having him begin Latin earlier. The old four-year course in many places has been extended downward one or two years; and it is in this way that most of the five-year and six-year courses have been established. Such is clearly the rational procedure, both because of the better results obtained with pupils who begin Latin early, and because of the undesirability, if not the impossibility, of securing the additional Latin by keeping pupils at school beyond the age at which they now usually complete the course.

The problem, therefore, which is likely to be encountered by every school that has to face the question of the extension of its Latin course is the problem of having Latin begun one or more years earlier than at present, and of using the additional time upon a rationally coherent plan. As a four-year or five-year course is extended, here and there in different parts of the country, into a six-year course, and even as a three-year course is extended into a four-year course, it is desirable that the extension be accomplished according to some common understanding. In the case of schools which do not purpose to extend the course in length, but desire to use the present available time to better advantage, it is perhaps even more important that the inner modifications which may be introduced without additional expenditure of time should likewise be made in accordance with a common plan.

In taking up the first problem — the problem presented by the variation in length of Latin courses — the committee was forced to regard the four-year course of five exercises a week as the only available general standard, for the reason that, as has been said, it corresponds, more nearly than any other, to the actual practice of the majority of American schools. The three-year course was considered as an incomplete four-year course, and was not treated as a separately existing type. Consequently no attempt was made to present a model three-year course, for it was assumed that three-year courses, if constructed, would be formed out of elements of the four-year course. Then a six-year course was framed, containing everything in the four-year course, together with such amplifications and additions as would render the six-year course a rationally connected whole. The five-year course, being intermediate between the four-year and the six-year courses, appeared in one aspect as an extension of the

four-year course, and in another as on uncompleted six-year course. Inasmuch as, in many instances, the conversion of a four-year into a six-year course might be made, not by establishing a six-year course immediately, but by passing thru a transitional five-year course, it seemed best to draw up the five-year course in such a manner that it would serve as a transition from the four-year to the six-year course, and would at the same time preserve its own rational unity, so that schools which might never attain to a six-year course should nevertheless find all the parts of a five-year course thoroly co-ordinated with one another.

Moreover, since schools with younger pupils naturally find it better to spend more time on the elements, while schools with older and presumably more mature pupils may prefer to do a larger amount of reading, the five-year course has been drawn up in a double form, with this alternative in view; but in either form it will serve as a logical transition from the four-year to the six-year course, and likewise as a course complete in itself. The proposed arrangement, whereby it will be made possible for schools to devote either four, five, or six years to Latin in accordance with a common plan, traveling the same road together, and parting company only where one stops and another goes on, will, if adopted, greatly reduce the practical difficulties arising from the present lack of uniformity in the length of Latin courses.

In dealing with the second problem, that of using to better advantage the time now allowed to Latin, thru inner modification of the existing course of study without increase of length, the committee found it necessary to construct, piece by piece, a standard course. Again the four-year course of five exercises a week had to be assumed as a standard. This number of exercises forms a fourth of the usual school week of about twenty periods. The proportion of time thus assumed for Latin corresponds closely, as has already been intimated, to the present practice of most of the schools possessing a four-year course. For some of them such a standard would represent an increase, tho a very slight one, beyond the amount of time now given. A standard of five exercises weekly for four years is, therefore, a practicable one for most of the schools that now give four years to Latin.

This amount of time being assumed as available, or obtainable without great effort, the next question which confronted the committee was to determine what subjects should be included in the four-year Latin course, how far each should be carried, and in what order they should be taken up. It would have been an easy task to draw up an inflexible program based solely on theoretical considerations; but such a program would show little wisdom. The only course left open to the committee was to endeavor to find a feasible way of improving upon our present practice, keeping constantly in mind the limitations prescribed by existing conditions.

The staple of our Latin instruction in the existing four-year courses consists of Latin grammar — usually taught in the form of Latin lessons — Latin prose composition, four or five books of Cæsar's *Gallic War* or some equivalent, six orations of Cicero, and six books of Virgil's *Æneid*. These may be taken as constituting a substantially irreducible minimum. Most schools having a four-year course do as much work as this; some do much more, many a little more. The contents of this minimum enter solidly into college-entrance requirements thruout the country, and the propriety of regarding them as essential elements in any Latin program will not be questioned. At times, indeed, some opposition has been made to the study of Cæsar, as too difficult for students in the second year of the course. But this objection loses its validity when the study of Cæsar is preceded by the reading of an adequate amount of simple Latin, and, in any case, the objection suggested may be met by allowing an equivalent from some easier author to be offered for a *part* of the *Commentaries;* to omit Cæsar entirely would be a retrograde step in the framing of Latin programs. Apart from this question with regard to the availability of Cæsar, no serious difference of opinion exists.

If, then, we assume that Latin grammar, Latin composition, some easy reading, four or five books of Cæsar (with a partial equivalent allowed), six orations of Cicero, and six books of Virgil may be considered as forming the assured basis of a standard four-year course, the question at once arises whether this is all that should enter into such a course. These subjects represent nothing more than the average practice of the majority of schools with four-year courses, and something less than many such schools are actually giving — and that, too, without being able to allow quite so much time as five exercises weekly thruout the four years.

To accept this substantially irreducible *minimum* found in the great majority of four-year courses, without adding anything to allow for the extra work now actually done in many places, and without taking account of the present marked tendency to increase the amount of Latin taught, would be equivalent to the proposing of a standard actually lower than our present practice. Accordingly it is necessary to strengthen the proposed standard four-year course to an extent which will make it somewhat better than some of the existing four-year courses; otherwise no proper model will be presented, in conformity with which our present four-year courses may be made not only more nearly uniform, but also a little better intrinsically. The small increment thus desired may be added in either of two ways. One is by an increase of the amount of work in the present subjects — a little more grammar, or easy reading, or prose composition, or Cæsar, or Cicero, or Virgil. The other is by increasing the variety and interest of the course by adding other subjects.

There is merit in both methods, and neither is to be recommended to

the entire exclusion of the other. In laying out a four-year course with five exercises weekly, it will be found practicable to take advantage of both methods. The desired increment, if it is to be obtained without adding to the list of existing subjects, may be secured by devoting more time to the grammar lessons, the written prose exercises, and the easy reading which precedes and prepares for the reading of Cæsar, Cicero, and Virgil; or it may be secured by an increase in the amount of reading in the works of one or more of these authors, provided it always is understood that, in case a school cannot both improve the quality of the more elementary work and at the same time read the maximum quantity suggested in any or all of the authors, it is better to do with thoroness the elementary grammar, written prose exercises, and easy reading, and to read the minimum amounts of the authors, than to sacrifice in any degree the earlier and fundamental work.

But in many schools, for various reasons — principally the desire for greater variety to increase the interest of pupils — other authors are introduced in addition to Cæsar, Cicero, and Virgil. Many teachers favor the *Lives* of Cornelius Nepos for easy reading just before Cæsar, or in place of a part of the *Commentaries*. The plan proposed by the committee, while not giving Nepos a fixed place, leaves ample room for such use as has been indicated. Selections from Eutropius, Florus, and the *Fables* may, of course, be employed, or the useful "made-Latin" of Lhomond's *Viri Romae*. The committee, however, does not find it expedient to recommend any one of these classes of material, or any special combination of them, as a fixed part of a course. They may all be made to serve one purpose, and, while uniformity may appear desirable at this point, it is by no means essential.

In the list of authors two additions are proposed — the *Catiline* of Sallust and a small amount of Ovid. Sallust, indeed, has of late years been less read in schools than formerly, but there are excellent reasons in favor of this author. His *Catiline* forms the best bridge over the gap between Cæsar and Cicero. Even young pupils find it attractive. It is not too hard. It helps to illustrate from a different angle of vision the intensely interesting age to which Cæsar and Cicero also belong. Its fine portraitures and graphic style give it merited rank as a classical masterpiece. And, finally, it is so brief that, while adding little to the amount read, it affords a special satisfaction in that it enables the young student to complete an entire work, instead of constantly occupying himself with selections; while at the same time it introduces variety into his reading. Having made the acquaintance of Cæsar, Sallust, and Cicero, the pupil has gained a considerable knowledge of the golden age of Latin prose — the foundation of all his subsequent study of the literature — as well as of the most important period of Roman history, that immediately preceding the downfall of the republic. In like manner the study of Ovid forms a

useful preparation for the reading of Virgil. Even a few hundred lines will serve to give variety to the poetical reading of the student, and enhance his appreciation of the golden age of Roman poetry, the period of Augustus, which forms the literary as well as the historical sequel to the great republican period.

It will be seen that a preference is here indicated for a particular order of authors: first, the prose writers of the republic, represented by Cæsar, Sallust, and Cicero; and then the poets of the Augustan age, represented by Ovid and Virgil. The prose writers give the normal syntax and the general standards of literary expression, thus providing the young student with the proper foundation for all subsequent study of the language. The poets selected not only belong to a later age than the prose writers named, but are read with greater ease and profit after the student's knowledge of prose usages is established. A further consideration in favor of the order recommended may be found in the relation of the authors read to the exercises in prose composition. Prose composition should be taught thru the whole four years of the course, and the exercises should be formed upon the best prose models. In the program of the first year provision is made for easy written exercises in connection with lessons in grammar. In that of the second year the Latin writing will naturally be based on Cæsar. If Cicero is read in the third year, the Latin writing will, of course, be based on Cicero, and may continue to be based upon this author in the fourth year, even if poetry be read exclusively. If, on the other hand, Virgil is read in the third year, it will be difficult to maintain the course in Latin writing, in either that or the following year, on as high a level as is possible under the other arrangement. Still, the fact remains that there is a division of opinion upon this one phase of the subject. In many schools Virgil is read before Cicero. If the adoption of a model four-year Latin course were to turn upon this one point of the order in which the two authors should be read, probably no agreement would be reached. It is, of course, more important that the two authors be *read*, in whatever order, than that the order of the reading should be uniform. It is also important that the reading of additional writers, such as Sallust and Ovid, shall not be made to depend upon any considerations of order. In the four-year course outlined below, the last two years are mainly occupied with Sallust, Cicero, Ovid, and Virgil. The order in which these four authors are placed in the program indicates the clear preference of the committee, reached after extended conference with representative schoolmen in the auxiliary committees; while, on the other hand, the omission of any line of separation between the third and fourth years is intended to express the recognition, on the part of the committee, of the existence of differing opinions on the subject.

The arrangement of the earlier part of the four-year course naturally involves several questions connected with the methods to be pursued in

the elementary study of the subject. The work of the earliest stage must, of course, be mainly disciplinary. The study of grammar gives acquaintance with the forms and laws of the language, and the progressive acquisition of vocabulary gives the material for reading, while easy exercises in the writing of Latin prose and training in simple reading organize this material again under the forms and laws of grammar. These principles govern all sound elementary teaching in the subject.

At the same time emphasis needs to be laid on the spirit and perspective characterizing this earlier work. Easy reading should be begun at the earliest possible moment. The writing of easy sentences, even if consisting of only three or four words, should be commenced at the outset, and out of this writing should be developed gradually the fuller practice in connected expression which ought to be continued thru the entire course. In all written exercises, of whatever kind, the long vowels should be marked. There should be abundant practice in reading Latin aloud, pains being taken to make the pronunciation conform to the quantities; while, at the same time, great emphasis should be laid upon intelligent expression. The student should be carefully trained to take in the meaning of the sentence *in the order in which it stands*, and *before translating*. The English of the translation, too, should be *genuine* English, not *Latin*-English. As a help to the pupil's understanding, he should memorize short prose passages, maxims, and bits of poetry. These will remain with him, and will ever afterward contribute to his enjoyment of the classics.

The proposed standard four-year course has been drawn upon the basis of these convictions. It has not, to be sure, been the intention to represent our present practice without change; and accordingly we can scarcely expect that all of the schools which give four years to Latin will immediately adopt the course as it stands. In the case of most schools, however, it seems reasonable to look forward to the acceptance of as strong a program as is here given, even if only the minimum amounts of the authors recommended shall be read. The plan is proposed as a model toward which all our present four-year courses can be made to approach closely, and thus to conform to one another in a degree which in no other way seems possible of attainment. Tho uniformity in the particular parts of the authors read may be desirable, no recommendation is made in this respect, except in the case of Sallust's *Catiline*. Teachers naturally will not be in perfect agreement in regard to the particular books of Cæsar and orations of Cicero which they would prefer to have their classes read. In most cases the selection is influenced by tradition, and, in any event, it is impossible to arrive at uniformity, for the reason that many teachers prefer to make changes from year to year. In relation to college-entrance requirements, however, this diversity occasions no especial difficulty, because the colleges are inclined more and more to be liberal in accepting equivalents.

Embodying in a program the suggestions which have been offered, we obtain the following standard four-year Latin course:

PROPOSED FOUR-YEAR LATIN COURSE

(*Five periods weekly thruout the four years*)

FIRST YEAR

Latin lessons, accompanied from an early stage by the reading of simple selections. Easy reading: twenty to thirty pages of a consecutive text.

In all written exercises the long vowels should be marked, and in all oral exercises pains should be taken to make the pronunciation conform to the quantities.

The student should be trained from the beginning to grasp the meaning of the Latin before translating, and then to render into idiomatic English; and should be taught to read the Latin aloud with intelligent expression.

SECOND YEAR

Selections from Cæsar's *Gallic War* equivalent in amount to four or five books; selections from other prose writers, such as Nepos, may be taken as a substitute for one, or at most two, books.

The equivalent of at least one period a week in prose composition based on Cæsar.

Reading aloud and translating, together with training in correct methods of apprehending the author's meaning, both prepared and unprepared passages being used as material. The memorizing of selected passages.

THIRD AND FOURTH YEARS

Sallust's *Catiline*.

Cicero: six to nine orations (including the *Manilian Law*).

Ovid: five hundred to fifteen hundred verses.

Virgil's *Æneid*: six to nine books.

The equivalent of at least one period a week in prose composition based on Cicero.

The reading of Latin aloud. The memorizing of selected passages.

The bearing which the adoption of a standard four-year course would have on college-entrance requirements is obvious. The minimum amounts proposed — consisting of Latin grammar, prose composition, four books of Cæsar, Sallust's *Catiline*, six orations of Cicero, a little Ovid, and six books of Virgil — may easily be accepted as a fixed minimum entrance requirement.

The question may be raised whether the proposed standard four-year course is sufficiently elastic in the choice of subjects. If it is not, it is in so far impracticable. Nevertheless, if a standard is made too elastic, its value as a standard is destroyed. American schools exhibit a marked diversity, such as, perhaps, will not be found in the schools of all Europe. This striking individuality is not a thing to be rashly denounced or unduly discouraged. It is in accord with our diversified and free American life. But in the case of our schools, and of our colleges too, the individuality is excessive, and detrimental to the interests of scholar and teacher alike. The effect upon the colleges produced by this individuality on the part of the schools may be imagined when it is remembered that

a single class in one of the former is sure to contain students from a large number of the latter.

The differences in our Latin programs ought not to be so great as to preclude agreement upon a list of fundamental subjects, their general order of presentation, and their mode of treatment. The line between tolerable and intolerable differences may, like some other boundary lines, be impossible to draw with precision; yet, even when we cannot draw exact boundaries, it is usually possible to distinguish regions, and to define, and even reduce, the area under dispute. Such disagreement as actually exists in the present instance is mainly the result merely of particular preferences in matters of detail. The principal difference, as already mentioned, concerns the reading of Cæsar; but the difficulty occasioned by the difference is met, in the proposals of the committee, partly by the suggestion of an equivalent for a part of Cæsar in the program of the school, and partly by the willingness of colleges to accept still other equivalents at the entrance examinations. There is also a minor difference of opinion in relation to the use of Sallust and Ovid; but, with these exceptions, there is no important disagreement regarding the minimum amounts. Where so much is unanimously approved, and where the preponderating weight of opinion is strongly fixed in regard to even the mildly disputed points, it is certainly time to agree upon a minimum standard for gradual imitation, especially when the proposed standard is homogeneously consistent, and embodies a fundamental principle.

Up to this point the question of flexibility has remained untouched, but agreement as to the mode of attaining flexibility has been made possible. In the framing of a standard course, the committee found itself concerned, not so much with the question whether it should recommend more or fewer subjects, but whether it should recommend a greater or less amount of each subject. In the case of grammar and prose composition, it recognized that the determination of the amount of ground to be covered must be left to the individual teacher; tho the committee is of the opinion that the systematic study of both of these subjects should be carried thru the entire course.

As regards the ground to be covered in the authors, while it is desirable that as much reading as possible should be done, nevertheless thoroness should never be sacrificed to quantity. Only a moderate range of variation therefore is suggested — which amounts, for example, to a single book in the case of Cæsar, three orations in the case of Cicero, a thousand lines in the case of Ovid, and three books in the case of Virgil. This additional reading can be done rapidly, if the earlier work in the authors has been sufficiently accurate and painstaking. It may not be expedient for all schools at once to read the maximum amounts suggested. But the program presented possesses the advantage of conforming closely,

in the statement of maximums, to the actual practice of many schools — a practice which is not beyond the attainment of a school that is able to devote five exercises weekly to Latin for four years — while in the statement of minimums it presents a standard easily reached under almost any conditions.

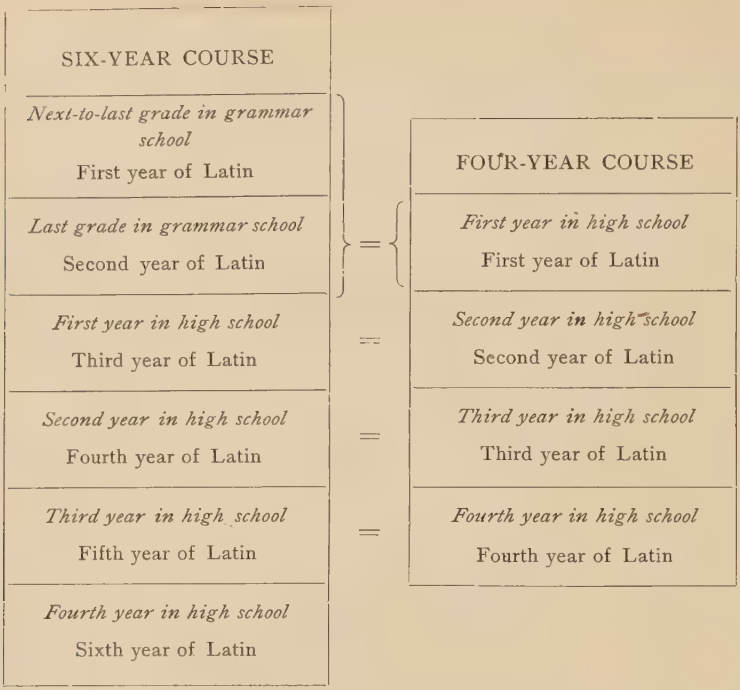
The committee, however, would not have been justified in limiting its attention to the problems presented by the four-year course. It was surprised to find in how many schools five-year and six-year courses are in actual operation today. The demand seemed imperative that it should undertake to formulate courses extending beyond the four-year limit. It accordingly presents a five-year course, drawn in double form. The first form is the standard four-year course, with the work of the first year extended over two years in order to give twice the amount of time for grammar lessons, the writing of simple exercises, and easy reading. This form is intended to meet the needs of students who commence Latin a year earlier than in the ordinary four-year course. All educational experience shows that the best results may be secured from the study of Latin when the subject is commenced somewhat earlier than is usual in this country, and at least two years are given to the elementary work before the pupil begins the reading of Nepos or Cæsar. The second form is designed for schools which have more mature and stronger pupils. The work of the first four years of this course coincides with that of the four-year standard course; the additional year is devoted mainly to reading. The recommendation is made that Virgil's *Æneid* be completed, in order that pupils who have the time for a five-year course may enjoy the satisfaction of reading to the end the greatest Latin epic, and viewing it as an artistic whole. An additional amount of Cicero is also recommended: the two essays *On Old Age* and *On Friendship*, which are short and complete in themselves, together with some of the briefer and more interesting *Letters*. Thus the pupil's acquaintance with Cicero's many-sided literary and intellectual accomplishments will be extended, while the selections suggested will furnish the best possible model of style for the writing of Latin in the latter part of the course.

A six-year course may be established at once by introducing Latin into the last two years of the grammar schools; such was the method adopted in the city of Chicago. Or a six-year course may be developed out of the five-year course, thru the use of either of the forms which have been suggested. In either case it is obviously desirable to aim at a fair degree of uniformity in such courses, and thus avoid for them the inconveniences from which our present four-year courses suffer. In the six-year course, at any rate, two years can be given to that careful and thoro preparation for reading which not only forms the best foundation for all later work in Latin, but also constitutes, for this period of the student's education, the most effective instrument of training in exact

habits of thought and of expression. If two years are given to this sort of work, most of the difficulties felt by the young pupil in entering upon the study of Cæsar will have been anticipated and overcome. Thus arranged, the first five years of the six-year course and the five-year course in the first form presented will be identical in respect of the subjects taken up and the order of arrangement. The work of the sixth year will then correspond closely with that of the last year of the five-year course as given in the second form; that is, it will be devoted to the finishing of the *Æneid*, to the reading of Cicero's essays *On Old Age* and *On Friendship*, and of selected *Letters*, and to weekly exercises in prose composition based on Cicero. Here also the principal object should be, not to extend widely the range of authors taken up, but so to adjust the work of the course to the needs of the pupil's intellectual life as most effectively to promote his development at this period.

In a number of cities it has been thought advantageous to give two years of Latin in the grammar school rather than one. The reason is that, since the length of the high-school course, by common consent, remains fixed at four years, the study of Latin for only a single year before entrance into the high school is not only less fruitful in itself, but is also less satisfactorily adjusted to the other studies of the grammar-school course. The arrangement is also found to be advantageous from the point of view of the adjustment of the grammar-school and high-school courses to each other. In a city in which two years are given to Latin in the grammar school, the high school also will undoubtedly continue to give a four-year course. Pupils, then, who come up from the grammar schools with two years of Latin will in the high school find it possible to enter upon work which corresponds with that of the second, third, and fourth years of the four-year course, and will need to be taught separately from other high-school students only in the sixth year of their Latin study; in other words, immediately upon entering the high school they may be united with the second-year students in the four-year course. In large high schools separate sections need to be formed in any case for each Latin class, and probably it will be found advantageous to teach the students of the six-year course by themselves. In like manner, the adjustment of a six-year or five-year course to an already existing four-year course will be found easy in the case of academies and private schools.

A plan by which the work of the four-year Latin course may be correlated with that of the six-year course is indicated in the following diagram:


SIX-YEAR COURSE
Next-to-last grade in grammar school
First year of Latin
Last grade in grammar school
Second year of Latin
First year in high school
Third year of Latin
Second year in high school
Fourth year of Latin
Third year in high school
Fifth year of Latin
Fourth year in high school
Sixth year of Latin
FOUR-YEAR COURSE
First year in high school
First year of Latin
Second year in high school
Second year of Latin
Third year in high school
Third year of Latin
Fourth year in high school
Fourth year of Latin

Led by the considerations which have been briefly presented, the committee, after careful deliberation, has framed the three programs subjoined: one for a four-year course, one for a five-year course (in two forms), and one for a six-year course. We commend these programs to the consideration of the schools, hoping that they may be found convenient as standard or model courses.

FOUR-YEAR LATIN COURSE

(*Five periods weekly thruout the four years*)

FIRST YEAR

Latin lessons, acompanied from an early stage by the reading of very simple selections. Easy reading: twenty to thirty pages of consecutive text.

In all written exercises the long vowels should be marked, and in all oral exercises pains should be taken to make the pronunciation conform to the quantities.

The student should be trained from the beginning to grasp the meaning of the Latin before translating, and then to render into idiomatic English; and should be taught to read the Latin aloud with intelligent expression.

SECOND YEAR

Selections from Cæsar's *Gallic War* equivalent in amount to four or five books; selections from other prose writers, such as Nepos, may be taken as a substitute for an amount up to, but not exceeding, two books.

The equivalent of at least one period a week in prose composition based on Cæsar.

Reading aloud and translating, together with training in correct methods of apprehending the author's meaning, both prepared and unprepared passages being used as material. The memorizing of selected passages.

THIRD AND FOURTH YEARS

Sallust's *Catiline.*

Cicero: six to nine orations (including the *Manilian Law*).

Ovid: five hundred to fifteen hundred verses.

Virgil's *Æneid:* six to nine books.

The equivalent of at least one period a week in prose composition based on Cicero.

The reading of Latin aloud. The memorizing of selected passages.

FIVE-YEAR LATIN COURSE

FIRST FORM

(*Five periods weekly thruout the five years*)

FIRST AND SECOND YEARS

The same as the first year of the four-year course.

THIRD YEAR

The same as the second year of the four-year course.

FOURTH AND FIFTH YEARS

The same as the third and fourth years of the four-year course.

FIVE-YEAR LATIN COURSE

SECOND FORM

(*Five periods weekly thruout the five years*)

FIRST YEAR

The same as the first year of the four-year course.

SECOND YEAR

The same as the second year of the four-year course.

THIRD AND FOURTH YEARS

The same as the third and fouth years of the four-year course.

FIFTH YEAR

Virgil's *Æneid:* completed.

Cicero: *De Senectute* and *De Amicitia;* selected *Letters.*

The equivalent of at least one period a week in prose composition based on Cicero.

The reading of Latin aloud. The memorizing of selected passages.

SIX-YEAR LATIN COURSE

(*Five periods weekly thruout the six years*)

FIRST AND SECOND YEARS

The same as the first year of the four-year course.

THIRD YEAR

The same as the second year of the four-year course.

FOURTH AND FIFTH YEARS

The same as the third and fourth years of the four-year course.

SIXTH YEAR

Virgil's *Æneid:* completed.

Cicero: *De Senectute* and *De Amicitia;* selected *Letters.*

The equivalent of at least one period a week in prose composition based on Cicero.

The reading of Latin aloud. The memorizing of selected passages.

APPENDIX A

COMPARATIVE TABLE SHOWING IN CONSPECTUS THE CONSTITUTION AND CO-ORDINATION OF THE FOUR-YEAR, FIVE-YEAR, AND SIX-YEAR COURSES IN LATIN RECOMMENDED FOR SECONDARY SCHOOLS BY THE COMMITTEE OF TWELVE OF THE AMERICAN PHILOLOGICAL ASSOCIATION

Estimated average age of pupils	FOUR-YEAR COURSE	FIVE-YEAR COURSE	FIVE-YEAR COURSE	SIX-YEAR COURSE
12–13				*First and second years*
		First and second years	*First year*	AGE OF BEGINNERS ABOUT TWELVE YEARS
13–14		AGE OF BEGINNERS ABOUT THIRTEEN YEARS	AGE OF BEGINNERS ABOUT THIRTEEN YEARS	Latin lessons. Easy reading. Written exercises. Training in understanding the Latin before translating. The reading of Latin aloud.
		Latin lessons. Easy reading. Written exercises. Training in understanding the Latin before translating. The reading of Latin aloud.	Latin lessons. Easy reading. Written exercises. Training in understanding the Latin before translating. The reading of Latin aloud.	
14–15	*First year* AGE OF BEGINNERS ABOUT FOURTEEN YEARS Latin lessons. Easy reading. Written exercises. Training in understanding the Latin before translating. The reading of Latin aloud.		*Second year* Cæsar: 4 or 5 books (an equivalent accepted for 1 or 2 books). Prose composition based on Cæsar. The reading of Latin aloud. Training in translation, etc. The memorizing of selected passages.	*Third year* Cæsar: 4 or 5 books (an equivalent accepted for 1 or 2 books). Prose composition based on Cæsar. The reading of Latin aloud. Training in translation, etc. The memorizing of selected passages
15–16	*Second year* Cæsar: 4 or 5 books (an equivalent accepted for 1 or 2 books). Prose composition based on Cæsar. The reading of Latin aloud. Training in translating, etc. The memorizing of selected passages.	*Third year* Cæsar: 4 or 5 books (an equivalent accepted for 1 or 2 books). Prose composition based on Cæsar. The reading of Latin aloud. Training in translating, etc. The memorizing of selected passages.	*Third and fourth years* Sallust's *Catiline.* Cicero: 6 to 9 *Orations.* Ovid: 500 to 1,500 verses. Virgil's *Æneid:* 6 to 9 books. Prose composition based on Cicero. The reading of Latin aloud. The memorizing of selected passages.	*Fourth and fifth years* Sallust's *Catiline.* Cicero: 6 to 9 *Orations.* Ovid: 500 to 1,500 verses. Virgil's *Æneid:* 6 to 9 books. Prose composition based on Cicero. The reading of Latin aloud. The memorizing of selected passages
16–17	*Third and fourth years* Sallust's *Catiline.* Cicero: 6 to 9 *Orations.* Ovid: 500 to 1,500 verses.	*Fourth and fifth years* Sallust's *Catiline.* Cicero: 6 to 9 *Orations.* Ovid: 500 to 1,500 verses.		
17–18	Virgil's *Æneid:* 6 to 9 books. Prose composition based on Cicero. The reading of Latin aloud. The memorizing of selected passages.	Virgil's *Æneid:* 6 to 9 books. Prose composition based on Cicero. The reading of Latin aloud. The memorizing of selected passages.	*Fifth year* Virgil's *Æneid* completed. Cicero: *De Senectute* and *De Amicitia;* selected *Letters.* Prose composition based on Cicero. The reading of Latin aloud. The memorizing of selected passages.	*Sixth year* Virgil's *Æneid* completed. Cicero: *De Senectute* and *De Amicitia;* selected *Letters.* Prose composition based on Cicero. The reading of Latin aloud. The memorizing of selected passages.

APPENDIX B

ON THE ENROLLMENT OF PUPILS IN THE VARIOUS STUDIES IN THE PUBLIC AND PRIVATE SECONDARY SCHOOLS OF THE UNITED STATES FOR THE YEARS 1890–98

Chap. xl of the *Report of the United States Commissioner of Education for 1896–97* (Washington, 1898) is devoted to the statistics of secondary schools, and contains comparative tables showing the percentages of pupils in the principal studies for each year from 1890 to 1897. In order to be able to exhibit the numerical totals as well as the percentages, and to bring the figures down to 1898, a member of the committee addressed an inquiry to the Hon. William T. Harris, United States Commissioner of Education, who furnished the appended statistical table:

NUMBER AND PER CENT. OF STUDENTS IN THE PUBLIC AND PRIVATE SECONDARY SCHOOLS IN THE UNITED STATES PURSUING CERTAIN STUDIES, 1890–98

	1889–90		1890–91		1891–92		1892–93		1893–94		1894–95		1895–96		1896–97		1897–98	
	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total	Number of students	Per cent. to total
Total number of secondary students	297,894		309,996		340,295		356,308		407,919		468,446		487,147		527,666		554,814	
Number studying—																		
Latin	100,144	33.62	123,376	39.80	132,036	38.80	149,473	41.94	177,898	43.59	205,004	43.76	225,164	46.22	248,250	48.01	274,293	49.44
Greek	12,869	4.32	14,402	4.65	15,940	4.68	17,534	4.92	20,353	4.99	22,159	4.73	22,304	4.58	23,805	4.60	24,994	4.50
French	28,032	9.41	28,090	9.06	29,244	8.59	35,455	9.94	42,072	10.31	45,746	9.77	49,327	10.13	51,596	9.98	58,165	10.45
German	34,208	11.48	48,596	15.68	39,505	11.01	40,331	13.00	52,152	12.78	58,921	12.58	64,293	13.20	71,151	13.70	78,994	14.24
Algebra	127,397	42.77	154,047	49.89	162,135	47.65	177,913	49.92	215,023	52.71	245,465	52.40	260,409	53.46	280,358	54.22	306,755	55.29
Geometry	59,781	20.07	71,421	23.04	76,625	22.52	86,818	24.36	103,054	25.25	114,813	24.51	125,237	25.71	135,668	26.24	147,515	26.59
Trigonometry	.....	.....	.....	.....	10,085	2.96	12,865	3.61	15,500	3.80	15,243	3.25	15,398	3.15	15,909	3.08	15,719	2.83
Astronomy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,690	5.27	25,272	5.19	25,263	4.89	24,433	4.40
Physics	63,644	21.36	71,473	23.06	75,002	22.04	79,208	22.25	97,974	24.02	103,768	22.15	106,427	21.85	107,093	20.89	113,658	20.48
Chemistry	28,665	9.62	32,162	10.37	34,295	10.08	35,568	9.98	42,600	10.31	43,607	9.31	44,597	9.15	47,461	9.18	47,448	8.55
Phys. geography	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	105,124	22.44	121,404	24.93	127,398	24.04	134,982	24.33
Geology	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,666	5.52	25,330	5.20	25,506	4.93	25,851	4.66
Physiology	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	131,304	28.03	151,391	31.08	155,002	29.98	162,990	29.38
Psychology	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,677	3.35	18,621	3.82	19,768	3.82	20,198	3.64
Rhetoric	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	146,672	31.31	157,208	32.27	174,649	33.78	195,848	35.30
English literature	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	215,810	38.90
History (other than U. S.)	82,909	27.83	92,272	29.77	106,666	31.35	119,250	33.46	145,939	35.78	162,336	34.65	174,070	35.73	186,581	36.08	209,034	37.68
Civics	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118,807	21.41

An examination of the Commissioner's report and the statistics contained in the table brings to light the following interesting facts:

1. In the nine years covered by the table the total enrollment of pupils in the secondary schools of the United States has risen from 297,894 to 554,814. This is a gain of 86 per cent., a rate probably five times that of the increase of population.

2. The remarkable increase just noted is found mainly in the high schools,[1] the enrollment in which increased in the eight years 1889–90 to 1896–97 from 202,963 to 409,443, a gain of more than 100 per cent. The enrollment in other secondary schools rose from 94,931 to 107,633, a gain of only 13.5 per cent., the rate of increase being about the same as that of the increase of population.

3. The statistics show that in these nine years marked progress has been made toward the concentration of school work upon a few central studies, in place of the tendency toward scattering which was formerly manifest. The rate of increase in the number of students pursuing such studies as algebra, geometry, history, Latin, and German far exceeds the rate of increase in the total enrollment. This fact indicates that studies of central importance are receiving recognition of their proper place and value; while other studies are being relegated to a secondary position or altogether excluded from the schools "Many hundreds of schools," says the Commissioner in his report, "which formerly offered courses of study made up of elementary and secondary branches, now confine their instruction strictly to high-school studies. This may be seen in the steady increase in the proportion of students pursuing these secondary studies."[2] So, too, in the private schools there are "indications of the strengthening of the secondary courses of study as in the case of the public high schools. Mixed courses made up of elementary and secondary studies are being replaced by courses in which only secondary studies proper are included. The demand for a better preparation of students for college is being met by private schools of secondary grade in all parts of the country."[3]

4. If now we arrange the studies of our table with statistics running from 1889–90 to 1897–98 according to the rate of increase in the enrollment of students pursuing them in the period extending from 1889 to 1898, we have the following order:

Studies	Enrollment in 1889–90	Enrollment in 1897–98	Per cent. of increase
1. *Latin*	100,144	274,293	174 —
2. History (except U. S.)	82,909	209,034	152 +
3. Geometry	59,781	147,515	147 —
4. Algebra	127,397	306,755	141 —
5. German	34,208	78,994	131 —
6. French	28,032	58,165	107 +
7. *Greek*	12,869	24,994	94 +
8. Physics	63,644	113,650	79 —
9. Chemistry	28,665	47,448	65 +

From these figures it appears that the study of Latin in the last nine years has gained in the enrollment of pupils at a rate greater than that of any other secondary-school study. The total gain of 174 per cent. is more than double the percentage of increase in the total enrollment of pupils in the schools. While the enrollment of pupils in Latin has thus increased 174 per cent., the increase of enrollment in German has been 131 per cent., and in Greek 94 per cent. In the same period the increase in the enrollment in physics has been 79 per cent., and in chemistry 65 per cent.,

5. It is at least encouraging to the friends of classical study to notice that in 1897–98 almost one-half of all the pupils enrolled in the secondary schools (49.44 per cent.) were engaged in the study of Latin. With this general increase of interest in Latin studies undoubtedly will come also a fuller recognition of the importance of Greek as an educational instrument. In the next decade an even more rapid increase in the enrollment of students in Greek may be expected than the very satisfactory one of 94 per cent. reported for the period covered by the table.

[1] The figures for this are given *up to 1897* in the Commissioner's *Report*, p. 1874.

[2] See Commissioner's *Report* for 1896-97, p. 1877.

[3] See the same, p. 1880.

APPENDIX C

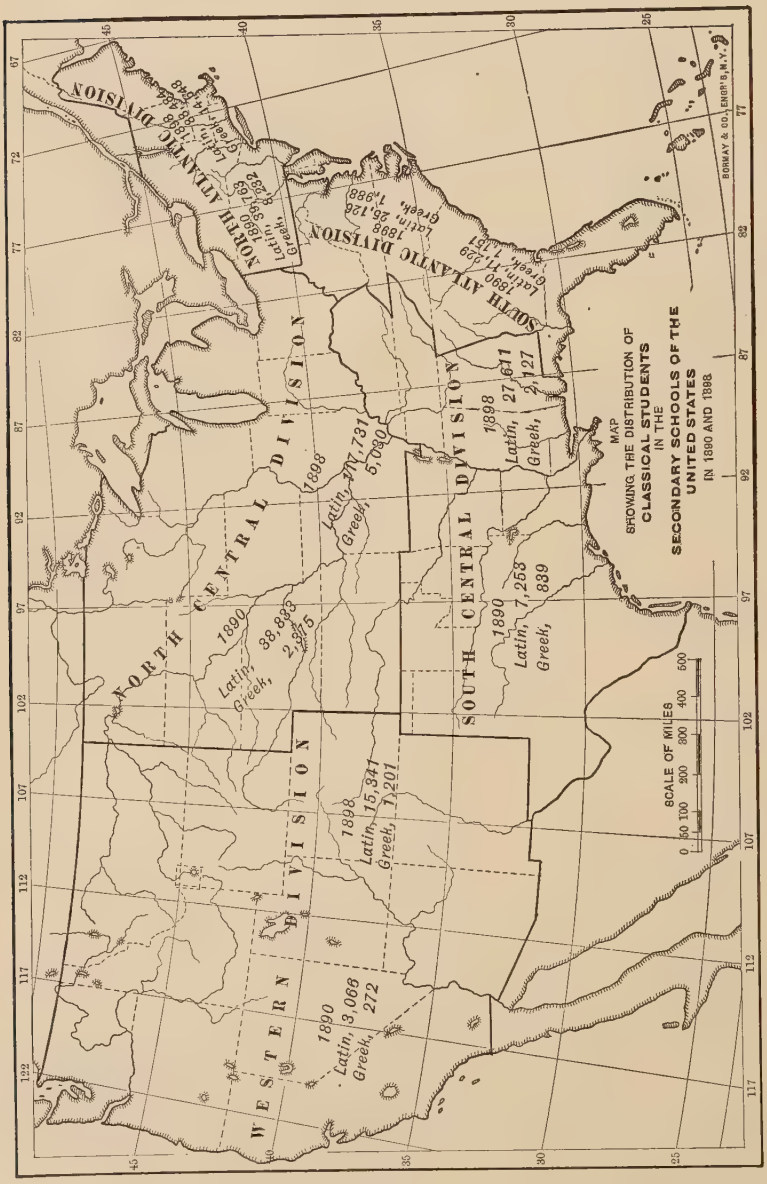
GEOGRAPHICAL DISTRIBUTION OF CLASSICAL STUDENTS IN THE SECONDARY SCHOOLS OF THE UNITED STATES IN 1889–90 AND IN 1897–98

Table showing the number of classical students in the secondary schools of each state and territory in 1890 and 1898: [1]

	Latin		Greek	
	1890	1898	1890	1898
United States	100,144	274,293	12,869	24,994
North Atlantic Division	39,763	88,484	8,232	14,648
South Atlantic Division	11,229	25,126	1,151	1,988
South Central Division [2]	7,253	27,611	839	2,127
North Central Division	38,833	117,731	2,375	5,030
Western Division	3,066	15,341	272	1,201
North Atlantic Division—				
Maine	2,530	5,090	591	1,376
New Hampshire	2,078	3,024	601	893
Vermont	1,721	1,937	366	345
Massachusetts	11,039	20,139	2,520	4,487
Rhode Island	1,113	1,834	239	419
Connecticut	2,382	5,377	427	951
New York	9,399	24,260	1,811	3,218
New Jersey	2,394	6,171	619	1,048
Pennsylvania	7,107	20,652	1,058	1,911
South Atlantic Division—				
Delaware	408	1,050	18	34
Maryland	1,298	3,693	130	239
District of Columbia	1,325	1,732	82	171
Virginia	2,599	4,624	134	178
West Virginia	93	1,075	21	87
North Carolina	1,306	3,071	208	375
South Carolina	813	3,030	68	308
Georgia	2,972	6,268	384	581
Florida	415	583	106	15
South Central Division [2]—				
Kentucky	1,711	4,595	147	503
Tennessee	1,545	5,178	197	637
Alabama	1,104	2,955	91	233
Mississippi	567	2,635	35	168
Louisiana	771	1,877	51	72
Texas	1,792	7,856	267	362
Arkansas	593	2,106	48	113
Indian Territory	34	205	3	35
Oklahoma	0	204	0	4
North Central Division—				
Ohio	9,741	21,919	665	1,239
Indiana	3,964	15,948	34	228
Illinois	6,660	19,398	413	833
Michigan	2,682	9,905	171	547
Wisconsin	2,140	4,790	239	421
Minnesota	2,808	7,542	209	320
Iowa	3,195	11,601	122	277
Missouri	3,679	10,907	307	706
North Dakota	127	695	2	14
South Dakota	118	770	2	53
Nebraska	1,482	7,556	81	215
Kansas	2,237	6,700	130	177
Western Division—				
Montana	82	585	0	7
Wyoming	64	165	0	0
Colorado	275	3,241	4	280
New Mexico	25	48	0	1
Arizona	10	87	0	0
Utah	130	645	12	43
Nevada	15	277	0	0
Idaho	25	211	25	5
Washington	151	1,288	16	21
Oregon	316	931	31	109
California	1,973	7,863	184	735

[1] The statistics here given are taken from the *Report* of the Commissioner of Education for 1889–90 and from an advance sheet of the *Report* for 1897–98.

[2] The figures for Latin in 1890 in the South Central Division really foot up 8,117, instead of 7,253, as given here. The error is due to an incorrect addition on p. 1390 of the *Report* of the Commissioner of Education for 1889–90. The additions of all the figures given have been carefully tested, and no other error has been discovered.


MAP
SHOWING THE DISTRIBUTION OF
CLASSICAL STUDENTS
IN THE
SECONDARY SCHOOLS OF THE
UNITED STATES
IN 1890 AND 1898
BORMAY & CO., ENGR'S, N.Y.
SCALE OF MILES
0 50 100 200 300 400 500
NORTH ATLANTIC DIVISION
1890 Latin, 1,988 Greek, 1,282
1898 Latin, 2,126 Greek, 1,988
SOUTH ATLANTIC DIVISION
1890 Latin, 1,529 Greek, 1,351
1898 Latin, 27,611 Greek, 2,127
NORTH CENTRAL DIVISION
1890 Latin, 38,383 Greek, 2,875
1898 Latin, 47,737 Greek, 5,080
SOUTH CENTRAL DIVISION
1890 Latin, 7,253 Greek, 839
1898 Latin, 15,841 Greek, 1,201
WESTERN DIVISION
1890 Latin, 3,066 Greek, 272

REPORT OF THE COMMITTEE OF TWELVE OF THE MODERN LANGUAGE ASSOCIATION OF AMERICA

The committee appointed two years ago to make recommendations upon the subject of preparatory requirements in French and German has the honor to submit the following report:[1]

SECTION I. PRELIMINARY

It will be remembered that the appointment of the committee grew out of a request of the National Educational Association, which has for some time been endeavoring to bring about a better regulation of secondary instruction in the subjects usually required for admission to American colleges. In pursuing this laudable undertaking the National Educational Association very properly saw fit to ask for the advice of various professional bodies, our own among the number. In particular, it was desired that we draw up model preparatory courses in French and German, and make recommendations concerning the practical management of these courses. The matter was brought to the attention of both branches of this association at the sessions of 1896, and we were asked to take appropriate action. As the business appeared to be of very great importance, it was thought best to turn it over to a large committee having a somewhat general mandate to investigate and report. The resolution under which the committee was appointed reads as follows:

> That a committee of twelve be appointed (*a*) to consider the position of the modern languages in secondary education; (*b*) to examine into and make recommendations upon methods of instruction, the training of teachers, and such other questions connected with the teaching of the modern languages in the secondary schools and the colleges as in the judgment of the committee may require consideration.
>
> That this committee shall consist of the present president of the association, Professor Calvin Thomas, as chairman, and eleven other members of the association, to be named by him.
>
> That the association hereby refers to this committee the request of a committee of the National Educational Association for co-operation in the consideration of the subject of college-entrance examinations in French and German.

In pursuance of this resolution the committee was made up early in the year 1897, and began its work by preparing a circular, which was sent

[1] The report was submitted in December, 1898, to both branches of the Modern Language Association, but owing to its length it could not be read in its entirety. The chairman of the committee was accordingly directed to have the report printed and mailed to the members of the association, who would thus be in a position to consider the document intelligently and vote upon the question of its adoption at the session, or sessions, of December, 1899. At the same time permission was given to hand in the report, with the necessary explanation, to the Committee on College-Entrance Requirements of the National Educational Association.

out to some 2,500 teachers. The object of the circular was to obtain information with regard to the present status of secondary instruction in French and German in the country at large, and also to elicit opinions with respect to a number of more or less debatable questions which, as was thought, would be likely to arise in the course of the committee's deliberations. Several hundred replies were received and collated, and the information thus obtained was laid before the committee at a session held in Philadelphia one year ago. We have not thought it wise to cumber this report, which will be long enough at the best, with a detailed recital of these statistics. Suffice it to say that, taken as a whole, they give us a picture of somewhat chaotic and bewildering conditions. Under various names our secondary schools have a large number of courses in which French and German figure as prominent or as subordinate subjects of instruction; courses of one, two, three, and four or more years; courses providing for two, three, four, or five recitations a week, and for recitation periods ranging from twenty-five to sixty minutes. And when we come to the colleges and higher scientific schools, the requirements for admission are hardly less multifarious. Various bachelor's degrees are conferred, and for admission to the courses leading to these degrees French and German figure variously, according as the modern language is offered in addition to the Latin and Greek of the classical preparatory course, or in place of Greek, or as the main linguistic study. Some of the colleges have also an elementary and an advanced requirement, with options variously managed.

Upon surveying the intricate problem thus presented, the members of the committee perceived at once that any report which they might make, if it was to be really useful, must be adapted, so far as practicable, to the conditions as they are. It was not for us to recommend radical changes in the American system, or lack of system, which has grown up in a natural way and must work out its own destiny. It was not for us to attempt to decide which of the various competing courses is the best course, or to antagonize any particular study. Nor could we assume to dictate to the colleges just how much knowledge of French or German, or both, they shall demand for admission to this, that, or the other undergraduate course. The colleges would certainly not consent to any surrender of their liberty to regulate their requirements in their own way. Most important of all, it was not for us to propose any arrangements which could be taken to imply that secondary instruction in French and German exists only for the sake of preparation for college. The great majority of those studying the modern languages in school do not go to college at all. Our secondary education must be recognized as having its own function, its own aims and ideals. In the great mass of the schools those who are preparing for college receive instruction in the same classes with those who are not preparing for college. And this

must always be so. These considerations seem to indicate that the proper line for the committee to pursue was as follows:

To describe a certain number of grades of preparatory instruction, corresponding to courses of different length; to define these grades as clearly as possible in terms of time and work and aim; and to make a few practical recommendations with regard to the management of the instruction — recommendations having as their sole object the educational benefit of the pupil. The members of the committee are naturally of the opinion that the study of a modern language in school has a distinct educational value of its own. The teacher's problem is to realize this value from the study. Whether the learner is going to college or not makes no difference, save as this consideration affects the amount of time he can devote to the modern language while preparing himself in the other necessary subjects. If such courses could be wisely drawn up, and if then they were to be recommended to the country upon the combined authority of the Modern Language Association and the National Educational Association, it seemed reasonable to expect that they would soon become the national norm of secondary instruction in the modern languages. It also seemed reasonable to expect that the colleges would be not only willing but glad to adopt the practice of stating their requirements in terms of the national grades. Such a mutual understanding between the colleges and the secondary schools should do much to bring a definitely understood order out of our existing chaos.

Having come a year ago to this general conclusion as to what could and should be done, the committee saw that it would be impossible to submit a satisfactory final report at the Philadelphia meeting. There were various matters that required further study. First, there was the question as to how many grades were really needed — whether two, or three, or more. Then there was the question of French and German in the lower school grades. This subject, it is true, had not been expressly committed to us; but it was known that many private schools, and not a few of our best public schools, already provide instruction in French or German in grades below the high school. It was also known that many good teachers strongly advocate this idea. But if it is wise to begin a modern language some time before the high school is reached, and if this practice is to be extended and to become more and more a part of our national system, it is evident that the modern-language work of the secondary schools must be more or less affected. Again, there was the perplexing question of method. In view of the sharp differences of opinion and of practice known to exist among teachers, the committee thought it best, before undertaking to advise teachers how to teach, to re-examine the whole matter carefully in the light of experience and in the light of recent contributions to the subject, to the end that its final recommendations might be as free as possible from any vagaries of personal prejudice.

Finally, there was the large task of drawing up the proposed courses and formulating the recommendations. Seeing all this work ahead, the committee decided, at the Philadelphia session, to report progress, ask for additional time and money, and, if this request should be granted, to appoint a number of subcommittees whose task it should be to inquire into and report upon the various questions just enumerated. The request was granted, and the committee adjourned after passing unanimously a single resolution, the import of which will be apparent from what was said a little while ago. The resolution was to the effect that secondary instruction in French and German should not be differentiated, according as the pupil is, or is not, preparing for college.

During the first half of the year 1898 the subcommittees worked at their several tasks by means of circulars and correspondence. Early in November a three-day session of the general committee was held in New York city. The meeting was attended by ten of the twelve members, two being unavoidably absent. The reports of the various subcommittees were received and discussed, together with other matters germane to the committee's general task. As a result of the three days' discussion, the substance of the following report was agreed upon. Since the November meeting the report, as hereinbelow drawn up, has been submitted to the members of the committee, and, after some further interchange of views by mail, has been agreed to by them unanimously.

SECTION II. VALUE OF THE MODERN LANGUAGES IN SECONDARY EDUCATION

Aside from the general disciplinary value common to all linguistic and literary studies, the study of French and German in the secondary schools is profitable in three ways: first, as an introduction to the life and literature of France and Germany; secondly, as a preparation for intellectual pursuits that require the ability to read French and German for information; thirdly, as the foundation of an accomplishment that may become useful in business and travel. Under each of these heads a great deal might be said; but an exhaustive discussion of the several topics would swell the volume of this report beyond the limits within which it is likely to be most useful. A few words must therefore suffice.

What we have called the general disciplinary value of linguistic and literary study is well understood the world over, and has long been recognized in the educational arrangements of every civilized nation. The study of a language other than the mother-tongue requires the learner to compare and discriminate, thus training the analytic and reflective faculties. The effort to express himself in the unfamiliar idiom, to translate from it into his own, makes him attentive to the meaning of words, gives a new insight into the possible resources of expression, and cultivates precision of thought and statement. Incidentally the memory

is strengthened and the power of steady application developed. In time such study opens the gate to a new literature, thus liberalizing the mind and giving an ampler outlook upon life. Thru literature the student is made a partaker in the intellectual life of other times and other peoples. He becomes familiar with their manners and customs, their ideals and institutions, their mistakes and failures, and with the artistic forms in which the national genius has expressed itself. When he leaves school, such knowledge not only enriches his personal life, but makes him a more useful, because a more intelligent, member of society. It exerts a steadying, sanative influence, for it furnishes him with standards based upon the best performance of the race everywhere. For us Americans, with our large confidence in our own ways and destiny, there is special need of the wisdom that comes from familiarity with the life, literature, and history of the great makers of European civilization.

What has been said up to this point relates to the profit of linguistic and literary study in general, a matter about which there is no serious difference of opinion among intelligent people. When, however, we come to consider the relative value of the ancient and the modern languages, we raise a moot question over which there has been endless discussion. Here, again, we refrain from lengthy argument. Let it be remarked, however, that the question is a very large one, to be decided only in the light of long and wide experience. To reach a sane view of the matter it is necessary to make some allowance on both sides for the partisanship of the professional teacher, who is generally more or less prone to overstate the importance of his specialty. Nor should we allow too great weight to the views of publicists, men of letters, and so forth, who treat the question from a purely personal point of view. The man in middle life, who has the advantage of knowing just what knowledge is most useful to him in his own work, can usually look back upon his early education and tell a tale of neglected opportunities and misapplied energy. Educational arrangements must be made for the many, and human tastes, needs, and aptitudes are various. For the boy or girl who must select a course of study long before he or she can know just what special attainment will be the most useful in after-life, it is enough to be assured that the discipline and culture derived from the study of foreign languages, whether ancient or modern, will certainly prove valuable.

The committee is of the opinion that the best course of study for the secondary school will always provide instruction in at least one ancient and one modern language. Beyond this we do not undertake to pass judgment upon the comparative merits of competing courses. It has always been the policy of the Modern Language Association not to antagonize the study of Latin and Greek. We ask for the modern languages in school and college nothing more than a fair chance to show what they are worth. We believe that they are worth, when properly taught, no less than the ancient

languages.[1] It is, of course, conceded that the Latin and Greek are the more "difficult" in the initial stages. But difficulty cannot be the highest test of educational utility, else Latin and Greek should themselves give way to Sanskrit and Chinese. Evidently it is the goodness of the kernel, and not the thickness and hardness of the shell, that we are mainly to think of. The kernel is the introduction to the life and literature of a great civilized people, which it is, for some reason, very important for us to know about. And here it may properly be urged on behalf of the modern languages that, just in proportion as they are easier to acquire, the essential benefit of the acquisition is the sooner realized. They give a quicker return upon the investment. This is a consideration that is of special importance for the secondary school. It is quite possible in an ordinary school course to learn to read French and German easily. The high-school graduate who has acquired this ability can at once turn it to account, even if he does not go to college. If he allows his ability to slip from him thru lack of practice, it is at least his own fault. In the case of the ancient languages, on the other hand, it is a well-understood and oft-lamented fact that the great majority, even of college graduates, never learn to read Latin and Greek with ease. Up to the last the effort is more or less painful. After leaving college they usually drop their Latin and Greek, and in a short time they cannot read at all. The profit of the study thus reduces, for the many, to its purely gymnastic value. That value, we are prepared to admit, is very great; but we would urge that the purely gymnastic value of the modern languages is, potentially, also very great. The argument of "difficulty" is often misused. There may be as much valuable exercise in walking five miles up a gentle slope as in climbing a mile up a sharp acclivity.

The first and greatest value of the study of the modern languages must be looked for, then, in the introduction of the learner to the life and literature of the two great peoples who, next to the English stock, have made the most important contributions to European civilization. That these literatures are as important, as worthy of study, as full of instruction for the modern man and woman as are those earlier literatures that once formed the great staple of education, is a proposition that we do not think necessary to argue, tho it is sometimes denied *in toto* by zealous advocates of classical study. For the peculiar intellectual myopia that can see nothing new and nothing good in modern literature the only remedy is the classical hellebore.

We attach greatest importance, then, to linguistic discipline and literary culture. But the ability to read French and German has also another value not directly connected with the study of *belles-lettres*. In nearly all branches of knowledge at the present time a large part of the best that has

[1] "It seems to me that the teaching of modern languages in many of the schools . . . . has now reached such a stage that we may fairly say that a training in French or German, or both, can be given which is just as substantial, strong, and useful a training as any other that is given in the same period." (President Eliot, *Educational Reform*, p. 378.)

been written is to be found in the German and French languages. One who wishes to study anything thoroly, no matter what, finds it highly convenient, if not absolutely necessary, to be able to read these languages in the pursuit of information. The high-school graduate who brings this ability with him to college has a great advantage in that he can at once begin to use it as a tool in prosecuting his studies. Of those who do not go to college it is fair to presume that a considerable portion will continue some line of private study, if not as a vocation, then as an avocation. For all such the ability to read French and German will be of great service.

It is next in order to remark briefly upon what is popularly called the "practical" value of French and German; that is, their utility as a means of intercourse. The practical command of a foreign language has a potential value that is at once perceived by everyone. It is felt to be desirable by multitudes who would probably care but little for the considerations presented in the preceding paragraphs of this section. The committee holds, however, that in our general scheme of secondary education the ability to converse in French or German should be regarded as of subordinate importance. We by no means say that it should be ignored, or that colloquial practice may safely be neglected in teaching. With this point the report will deal further on. Here we merely express the opinion that the ability to converse should not be regarded as a thing of primary importance for its own sake, but as auxiliary to the higher ends of linguistic scholarship and literary culture. The grounds of this opinion are briefly as follows:

The practical command of a living language, such as will be really useful for the ordinary purposes of life, presupposes a large amount of practice in speaking. The requisite amount of practice cannot possibly be given in an ordinary school course, even in a course of four years in length, in which the pupils come together four or five times a week, perhaps in classes of considerable size, remain with the teacher for three-quarters of an hour, and the rest of the time speak English. With the most skillful teachers, working with the best methods that can be devised, and concentrating their effort upon the one aim of teaching the pupil to talk, the results of such a course, unless the work of the school is supplemented by practice at home, is only an imperfect command of the language, which is of little use outside the class-room. Meanwhile the concentration of effort upon this one object necessarily involves the neglect of other things that are of more importance in the end. For it must be remembered that the process of learning to speak a foreign language has no educational value except as it is connected with, and grows out of, the improvement of the mind.

In the second place it is to be remarked that, while in certain European countries, by reason of their geographical position, or the character of the population, it is of very great practical importance that

the rising generation learns to speak two or three languages with facility, the conditions in the United States are different. If it were possible in the secondary school to impart a good practical command of French, it is evident that all but a minute proportion of those leaving school with this accomplishment would soon lose it for lack of occasion to use it. We have, it is true, a number of communities in which the ability to speak German is highly convenient, and may even have a local market value. But nowhere in the United States is this ability indispensable. The English language is the vernacular of the country and the medium of our civilization, and we wish it to become more so, rather than less so, with the lapse of time. So far as purely practical considerations go, it is for those who come to us to learn our language, not for us to learn theirs. If we teach a foreign language in our schools, it should be for the sake of its general educational value. At the same time, its potential value as a means of intercourse may very properly be kept in view. One who has received the best training that the secondary school can give may not be able to speak his modern language with facility for the practical purposes of life; but he will have been started in the right way, will have obtained a good general knowledge of the language, and will have had some practice in speaking. If, then, after leaving school, he needs to be able to speak the language, he has an excellent foundation on which to build. Proficiency will come rapidly with practice.

SECTION III. A CRITICAL REVIEW OF METHODS OF TEACHING

THE GRAMMAR METHOD

When the modern languages first became a regular subject for serious study in secondary schools, it was natural that teachers, having no other model to imitate, should adopt the time-honored plan followed in the department of Greek and Latin. According to this method the pupil is first put thru a volume of paradigms, rules, exceptions, and examples which he learns by heart. Only when he has thoroly mastered this book is he allowed to read; and even then his reading is usually regarded as a means of illustrating and emphasizing grammatical principles, rather than as a source of inspiration or of literary education. The amount of foreign literature studied by the class is, moreover, extremely small; but it is all carefully analyzed and translated, every lesson being, in general, repeated several times. Composition is used as an instrument for increasing still more the student's familiarity with inflections and rules. The foreign language is never spoken, and pronunciation is considered unimportant.

This method has fallen into discredit; and while it is not yet entirely banished from classical instruction, it can scarcely be found, in its original purity, among the modern-language courses of any civilized region. It has, however, certain undeniable advantages. In the first place it trains the mnemonic faculty; in the reaction against the hard, unattractive

schooling of our fathers, modern pedagogical fashion has gone so far that the power of conscious acquisition and retention is hardly exercised at all; children go to college or out into life with an embryonic memory, and the teacher's task rivals the labor of the Danaïdes. Secondly, the careful study of grammatical rules and their nice application in translation and composition form one of the best possible exercises in close reasoning. It may be urged that logical processes are not natural to the child; neither are they natural to the uninstructed adult; but to be a successful student or an intelligent citizen, a boy or man must be able to arrive at rational conclusions. Hence it is one of the chief duties of education to afford practice in clear and orderly thinking. The principal value of arithmetic and algebra as secondary-school studies lies in the fact that in them right and wrong reasoning are immediately and unmistakably distinguished by their results. In most subjects the white and black are not so clearly defined; between them lies a broad gray zone, the region of "not quite correct" and "not altogether bad," and it is toward this neutral belt that nearly all the pupil's efforts bend. The children "don't see why" their answer is not as good as any other, and the sloth and slovenliness native to the untrained human mind remain undisturbed. Now, grammatical analysis and synthesis, while less mechanical and more varied in their operations than elementary mathematics, are nearly or quite equal to it as a means of inculcating the habit of accurate ratiocination.

On the other hand, the grammar method is open to criticism on the ground that it neglects two of the most important objects of foreign-language study: the broadening of the mind thru contact with the life, the ideas, and the forms of thought and expression of different times and countries; and the cultivation of the artistic sense by the appreciative study of literary masterpieces. A still more potent objection is the contention that pure grammar is not calculated to inspire interest in pupils of the high-school age. This objection seems to be well founded, and, if so, it is a fatal one; for modern pedagogy, if it has accomplished nothing else, has established the fact that interest is absolutely essential to the performance of the best work in any field. It appears, then, that the day of the pure grammar method is past; but while devising a system more in accordance with the principles and the possibilities of our time, let us not forget that the old-fashioned way had its good features.

THE NATURAL METHOD

At the opposite pedagogical pole from the process just described we find the conversational or "natural" method. This educational "naturalism" is a reaction against the inflexible systematism of earlier teachers; we should, therefore, expect it to be somewhat aggressive and somewhat formless, more given to pulling down than to building up. It is a principle, an impulse, rather than a plan; and its products depend, to a

greater extent than those of any other school, on the personality of the instructor. Too often the results of a protracted and supposedly successful course of unalloyed conversation are a rapid but unintelligible pronunciation, the fluent use of incorrect forms, and, worst of all, a most discouraging self-complacency. Some peculiarly gifted teachers have succeeded in combining alertness with a reasonable degree of accuracy, but it will probably be found, in all such cases, that the instructor has resorted to devices not strictly "natural."

What is the genuine "natural method"? In its extreme form it consists of a series of monologs by the teacher, interspersed with exchanges of question and answer between instructor and pupil — all in the foreign language; almost the only evidence of system is the arrangement, in a general way, of the easier discourses and dialogs at the beginning and the more difficult at the end. A great deal of pantomime accompanies the talk. With the aid of this gesticulation, by attentive listening, and by dint of much repetition the beginner comes to associate certain acts and objects with certain combinations of sound, and finally reaches the point of reproducing the foreign words or phrases. When he has arrived at this stage, the expressions already familiar are connected with new ones in such a way that the former give the clue to the latter, and the vocabulary is rapidly extended, even general and abstract ideas being ultimately brought within the student's comprehension. The mother-tongue is strictly banished, not only from the pupil's lips, but, as far as possible, from his mind. Not until a considerable familiarity with the spoken idiom has been attained is the scholar permitted to see the foreign language in print; the study of grammar is reserved for a still later period. Composition consists of the written reproduction of the phrases orally acquired.

This method — if "method" is the proper term — is based on two general ideas; one true, the other false. The first is the belief that the interest so necessary to the successful prosecution of any study (and especially of language work) can most easily be aroused by the actual spoken use of the foreign tongue. The second is the theory that a boy or man can best learn a new language in the manner in which an infant first acquires its native speech. Hence comes the epithet "natural." The advocates of this view overlook, first, the fact that the child requires eight or ten years of incessant practice to gain even a tolerable command of its own tongue, and, secondly, the vast difference between the mind of the baby and that of the youth. The really natural methods of acquisition at these two stages of development are almost diametrically opposed. Let us consider, for instance, the learning of pronunciation. The newborn child, after various unsuccessful experiments, reproduces sounds correctly because it has no previous habits of speech to contend with. The boy or man, unless he is phonetically trained, or exceptionally acute of hearing, does not imitate at all. He merely substitutes for the several strange vowels and

consonants the English sounds which the foreign ones happen to suggest to him. That is why the pronunciation of conversational classes is generally not a whit better than that of scholars taught after the most antiquated fashion. In the attempt to inculcate the other elements of speech — inflections, syntax, and phraseology — the purely imitative process shows itself to be almost equally inadequate. We may justly urge, furthermore, against this style of teaching, that it provides little discipline for the intelligence; that it affords only the poorest kind of mnemonic training; that it favors vagueness of thought and imprecision of expression; and, finally, that it sacrifices the artistic interest of language study to a so-called "practical" one. On the other hand, it certainly does awaken enthusiasm among its disciples, and it stimulates and holds the attention.

The natural method has been vehemently attacked and just as vigorously defended. At present the violence of the contest has abated, and we are able to judge dispassionately the results of its introduction into our educational life. Those results have been mainly good. In summer schools and other institutions that have used the imitative process exclusively most of the pupils are persons who have had or will soon get some practice in grammar and reading. For them the conversation lessons are supplementary and form a useful addition to their training. In schools and colleges that have not accepted the "naturalistic" theory the fame of the new method has obliged teachers to adopt some of its practical features, thus bringing much needed life and variety into their instruction. It seems probable that the next generation will regard "naturalism" rather as a vivifying influence than as an independent method.[1]

THE PSYCHOLOGICAL METHOD

Out of the conviction that modern-language study should be made attractive, and out of the desire to adapt instruction to the known workings of the human mind, has come a system that seems more deserving of serious attention than the grammar method or the "natural" style of teaching. This is the system invented by Gouin and brought into general notice by Bétis.[2]

[1] For a description of the natural method see *Der Leitfaden für den Unterricht in der deutschen Sprache*, by G. Heness, and L. Sauveur's *Introduction to the Teaching of Living Languages*. The method is well exemplified, not only in the *Leitfaden*, but in *Der Sprachlehrer unter seinen Schülern*, by Heness, and in Sauveur's *Causeries avec mes élèves* and *Petites causeries*. All these works are now published by Messrs. Henry Holt & Co., of New York.

[2] Its operation and results are described at considerable length in *Die neueren Sprachen*, by R. Kron, in III, 1, 2, 3, 4, 5, 6 (published separately under the title *Die Methode Gouin, oder das Serien-System in Theorie und Praxis*, Marburg, 1896), and by V. Knorr in III, 8, and V, 9. The method has been subjected to a searching criticism by Traugott in the same periodical, VI, 6. It should be said here that Bétis has considerably altered the original plan; and opinions are divided concerning the respective advantages of the two versions. The real Gouin system can be studied in the author's *Art d'enseigner et d'étudier les langues*, Paris, 1880 (third edition in 1897); the Bétis or "psychological" method is illustrated by a volume called *The Facts of Life* (New York, 1896), by Bétis and Swan. Without presuming to pass judgment on the merits of the case, we shall confine ourselves to the revised plan, since that is the one more widely known and the only one that has been tried in America. It was brought to the attention of the English-speaking world in 1892 and 1893 by the articles of W. T. Stead, in the *Review of Reviews*. In the years 1895-97 it was used in Boston, Mass., by Bétis himself, and it is now on trial in one of the public high schools of the same city.

The psychological method rests on the principle of the association of ideas and the habit of "mental visualization." The whole current vocabulary of a language, in the form of short, idiomatic sentences, is divided up into groups, every group consisting of phrases that are intimately connected in subject. One group forms a lesson. These brief divisions are gathered together in chapters, each of which treats of one general topic, and several chapters make a "series." When a pupil has gone thru all the series, with numerous reviews, he will have mastered (so we are told) the whole spoken language. Every lesson is first worked out orally and then studied by the pupil from his book. On presenting each new word to the beginner the instructor exhorts him to close his eyes and form a distinct mental picture of the thing or act represented. This image (it is affirmed) will remain indissolubly connected with the word, and the evocation of the one will always recall the other. Sometimes real objects or drawings are used, and pantomime is frequently resorted to; but in most cases reliance is placed on the child's active imagination. It is never considered a sin to put in a word or two of English, and at the outset that language is very freely employed. Altho most of the talking is done by the teacher, the pupils are constantly called upon to repeat his sentences and to answer questions. After the first lessons written compositions may be prepared, made up of phrases already acquired. Grammatical instruction is begun early, concurrently with the other exercises, but the reading of consecutive texts is postponed until the bulk of the ordinary vocabulary has been learned. Many innovations have been introduced into the presentation of grammar, but most of them are more radical in appearance than in reality. Some, however, are extremely ingenious, and will doubtless be copied by instructors who do not see fit to adopt the whole system.

The Bétis method has the following obvious advantages: it trains the memory; it fascinates the student and holds his attention more closely than any other mode of teaching now in vogue; it gives the pupil, in a reasonably short time, a ready command over a large, well-arranged, and well-digested vocabulary; it affords, thru some of its conversational groups, an insight into the life of a foreign country. As for the other side, the system seems, as far as we can ascertain the facts, to lay itself open to these criticisms: it affords but little opportunity for the exercise of judgment; it entirely neglects, in the first years, the cultivation of the æsthetic sense, and assigns literary study to a stage which high-school pupils will scarcely ever reach. Moreover, its treatment of pronunciation is decidedly unsatisfactory; but this defect can probably be remedied without disturbing the rest of the scheme.

THE PHONETIC METHOD

Pronunciation, neglected in the three modes of instruction just mentioned, is the very foundation of a system that has of late years attracted

attention in all northern Europe, and has gained a considerable footing in Germany and Scandinavia.[1] Its advocates, while not entirely free from the intolerance and the self-confidence so characteristic of enthusiastic reformers, are men of sound scholarship, successful experience, and good standing in the educational world. As far as can be ascertained, they have arrived at results which go far toward justifying their seemingly extravagant claims. There have been few attempts to introduce the phonetic teaching in this country; probably the most extensive trial of it has been made at the Johns Hopkins University.

The phonetic method resembles the "natural" and the "psychological" schools in that it takes the modern spoken language as a basis, and at first relies mainly on oral instruction, using, as far as possible, the foreign language itself as a medium of communication. Unlike most "conversation" courses, however, it is very systematically constructed, and its beginning is strictly scientific. It begins with a training of the ear and the vocal organs, the pupils being thoroly drilled in the vowels and consonants of the strange tongue. These sounds are considered both as isolated phenomena and as elements of idiomatic phrases. The phrases, in turn, are combined into dialogs, descriptions, and stories. At this stage printed texts are used, but only in phonetic notation. The ordinary spelling is carefully kept from the students during the elementary period. It is said that the transition from sound symbols to standard orthography presents no serious difficulty. Objects, pictures, and maps are constantly displayed, and every effort is made to familiarize the class with the surroundings, the institutions, the habits, the character, and the mode of thought of the people whose language it is learning. The phonetic texts gradually increase in length and difficulty, and some of the latest are representative of literature. Inflections and syntax are studied inductively. Composition consists first of the oral and written reproduction of matter already heard or read, then of combinations of familiar phrases. Systematic grammar is reserved for a late stage, and translation comes last of all.

[1] The names by which it is known are the "reform," the "new," and the "phonetic" methods. It was outlined by Vietor, in his famous monograph *Der Sprachunterricht muss umkehren* (1882, new edition, Heilbronn, 1886), and its principal features are set forth on the cover of every number of the *Maître phonétique*. Both this periodical (the organ of the Association Phonétique Internationale) and *Die neueren Sprachen*, edited by Vietor, are devoted to the propagation of the phonetic method. The list of publications — books, pamphlets, and articles — which deal with the "reform method" is very large. A complete bibliography down to 1893 is given by H. Breymann in *Die neusprachliche Reform-Litteratur von 1876–1893*: Eine bibliographisch-kritische Uebersicht (Leipzig, 1893). Two articles by leading exponents of the method have appeared in American journals, viz., "A New Method of Language Teaching," by W. Vietor, in the *Educational Review*, Vol. VI, p. 351, and "Phonetics and Reform Method," by A. Rambeau, in *Modern Language Notes*, Vol. VIII, p. 161. An excellent report of observations made during a six-months' tour of inspection of German schools is given by Mary Brebner in *The Method of Teaching Modern Languages in Germany* (New York: Macmillan, 1898). A conservative, and, at the same time, fairly representative, presentation of the aims and methods of the "reformers" is given by W. Münch in his and F. Glauning's *Didaktik und Methodik des französischen und englischen Unterrichts*, Sonderausgabe aus A. Baumeister's *Handbuch der Erziehungs- und Unterrichtslehre für höhere Schulen*. On pp. 102 f. is to be found a select list of the more important writings on method in modern-language teaching which have appeared in recent years.

It is evident that this sort of instruction requires a special preparation and a special apparatus. Altho the pupils are not taught phonetics, it is essential that the teacher be something of a phonetician; and the present difficulty of obtaining adequate instruction in the science of speech-sounds has doubtless done much to hinder the rapid general adoption of Vietor's program. Let us hope that in the near future such training will be brought within the reach of all by means of courses conducted, in our universities and in our summer schools, by men who unite with the necessary scientific attainments a practical knowledge of the requirements of American pedagogy. Phonetic texts, too, tho not absolutely indispensable, are of the greatest assistance.[1]

This method, while it lacks the logical discipline of the old grammatical instruction, is more successful than any other in forming a good pronunciation and in giving pupils a ready and accurate control of the spoken language. The training it affords can hardly fail, moreover, to improve the quality of the student's voice and his enunciation of his mother-tongue. From the standpoint of mnemonic education, too, it ranks high. In stimulating interest it is nearly equal to the "natural" and "psychological" courses, and it is second only to the latter in holding the attention. The training of the attention should, by the way, be regarded as an important part of any pedagogical scheme; for the habit of inattention — the utter inability of pupils to fix their minds on anything for more than a few minutes at a time — is the most serious obstacle that confronts our secondary teachers. The attempt to give scholars, by ear and eye, by description, and by the use of objects and pictures, a correct and vivid idea of foreign life has been carried farther by the phoneticians than by any other school; but there is no reason, save the lack of rightly prepared instructors, why this feature should not be introduced into every method; the neglect of it defeats one of the principal objects of modern-language study. Another means to the same end is the system of international correspondence between school children of different countries.[2]

[1] Some good ones are already available: For French, by Beyer and P. Bassy. Rambeau and J. Passy have provided us with suitable chrestomathies. In German we have a little book by Vietor. The *Maître phonétique*, furthermore, is constantly furnishing material in various languages.

[2] Mentioned by Vietor in *Die neueren Sprachen*, V, 3, 165, and described by Professor Magill in *Modern Language Notes*, XIII, 3. The plan was first suggested in the *Revue universitaire* for June, 1896, by Professor P. Mieille, who gave an account of his efforts to bring about an interchange of letters between French children studying English and English children studying French. His idea attracted immediate attention in France and England, ere long also in Germany, Italy, and the United States, and it was soon perceived that it could be turned to profit, not only for school children, but also for adults, especially for teachers. Having already been tried on a large scale, the plan has passed the experimental stage, and may be confidently recommended as a valuable aid in the learning of a living language. At first, correspondents could be secured only thru certain journals, which published lists of names in consideration of a subscription. Later, on the initiative of the *Manuel général de l'instruction primaire*, a large committee was appointed, which now undertakes gratuitously to bring correspondents together. The vice-president of the English section for women is Miss E. Williams, professeur aux Écoles de Sèvres et de Fontinay, whose address is No. 6 rue de la Sorbonne, Paris. Miss Williams' secretary, who conducts her correspondence, is Mme.

What are the disadvantages of the "phonetic" plan, when we consider it from the point of view of our American high schools? In the first place, it seems, like other "oral" methods, to overlook the importance of literary education, for it postpones the reading of real books to a stage that is beyond our secondary period. In Europe, where intercourse between foreign countries is easy and frequent, and a command of several languages has a recognized commercial value, it is natural that a practical mastery of the strange tongue should seem highly desirable. With us, isolated as we are, a speaking knowledge of French and German has, except for teachers, but little pecuniary worth; and even in the case of a student, who has acquired it for pleasure alone, the opportunities for practice are so few that his hardly won accomplishment will soon slip from him. Familiarity with pronunciation and a certain ability to handle foreign constructions are, indeed, essential to a proper appreciation of the literature; but if literary study is not reached, of what avail is the preparatory training? For we must bear in mind that the vast majority of our pupils — those for whom the course should be planned — will not continue their education beyond the high school. It has been pointed out that oral work, besides exercising the organs of speech, arouses interest and fosters a certain alertness of mind, and is therefore valuable for its own sake. We may question, however, whether these benefits make up for the sacrifice of all the æsthetic culture and the intellectual broadening that come only from the reading of good books.

To this criticism the European advocates of the method would surely reply that they believe in abundant reading, after the student has mastered the spoken idiom. It appears, then, that the real fault of their program, as applied to our conditions, is not so much that its underlying principle is entirely incompatible with our creed as that it calls for much more time than we allot to foreign language. In fact, we may well doubt whether, with our three or four hours a week for three or four years, our scholars would ever reach the end even of the elementary stage; they certainly would not go beyond it; their acquisition would be only a fragment. If we should wish to introduce this or any other thorogoing method, we should be obliged to increase the importance of French and German in the school curriculum; and such increase is desirable from every point of view. Not only should the pupils who are intending to continue these studies in college receive the best possible preliminary training, but all children who begin the subjects at all should give them

Rossignol, 117 rue Nôtre Dame de Champs, Paris. The vice-president of the English section for men is Professor A. Mouchet, 16 rue de St. Guillaume, Asnières (près Paris). Either of these three can be addressed by American teachers desiring French correspondents for themselves or for their pupils. In Germany the plan has been taken up prominently by Dr. K. A. Martin Hartmann, of Leipzig, who has reported upon a trial of it in the Saxon schools and published a body of *Vorschläge* relating to it. The advantages of the system are well set forth by Petri in *Die neueren Sprachen*, VI, 511, and objections to it are answered by Hartmann in the same journal, VI, 324. A second and more extended article by Professor Edward H. Magill, of Swarthmore College, Pennsylvania, may be found in *Modern Language Notes* for February, 1899.

time enough to admit of an extended course, conducted according to the most enlightened principles. In order to gain the necessary hours, the foreign language must be taken up earlier, or some other high-school topic must be sacrificed. A few things thoroly and intelligently done make the best secondary discipline. As long, however, as our present conditions last it is clear that we must give up something. Until we are all willing greatly to lengthen the time given to the linguistic part of our children's education, we shall have to renounce the idea of a full, well-rounded knowledge of French and German, and, selecting the portion of the subject that appears most important for the greatest number, devote ourselves to the cultivation of that restricted field. Considerations of this nature have led many thoughtful teachers to adopt a mode of instruction that we may call the "reading method."

THE READING METHOD

The title explains itself. The study of texts from the very beginning of the course, abundant practice in translation at sight, leading ultimately to the ability to read the foreign language with ease and without the interposition of English, are the principal features of this program. Grammar and composition are regarded merely as a help to reading, and are reduced to the essentials; sometimes accidence and syntax are first learned inductively, but oftener a small text-book is used concurrently with translation. Great importance is attached to the use of good English in the renderings. Pronunciation receives scant attention; there is little or no oral exercise.

This method has been much used of late in our schools and colleges, especially in those that have large classes, a short course, and an American teacher. The great advantage of the process is that it quickly enables the student to read French and German literature — not with the complete appreciation that only an all-around command of the language can give, but with the same kind of intelligence and enjoyment with which good classical scholars read Latin. Indirectly it helps the pupil to form a good style, and to increase the volume and precision of his English vocabulary; it cultivates the taste by dwelling upon delicacies of expression; it exercises the memory thru the enforced retention of words and idioms; it trains the linguistic sense by calling attention to the points of resemblance and differences in various tongues; and the exact fitting of phrase to thought forms an excellent discipline for the judgment.

On the other hand, in addition to the fact that it deals with only one aspect of language, the reading method is lacking in vivacity and in stimulus to the attention; it interests only the more serious pupils. Moreover, the continued use, year after year, of an easy way of teaching — for it is comparatively easy, and requires but little special training — may prove demoralizing to the instructor, dull his appetite for

self-improvement, and make him indolent and easily satisfied with his qualifications.

SECTION IV. METHOD AS RELATED TO THE PREPARATION OF TEACHERS

If all our classes were in the hands of born teachers, ideally prepared for their work, advice with respect to method would be quite superfluous. Every teacher would create for himself the method best suited to his class and to his own peculiar gifts. His personality would infuse life and efficacy into any process he would be likely to adopt. But in a profession so widely pursued we cannot expect the majority of its followers to show genuine vocation. The most of our teachers are made, and we must see to it that they be as well made as possible. It cannot be too strongly urged upon school authorities that, if modern-language instruction is to do the good work which it is capable of doing, it must be given by thoroly competent teachers. The committee's investigations show, and it is a pleasure to testify to the fact, that we already have a goodly number of secondary teachers who answer to that description. Nevertheless, our general standard is still far too low. For some time to come the majority of our teachers will necessarily be guided to a large extent, in the choice of methods, by the consideration of their own competence.

But, while it is easy to insist, broadly, upon the importance of adequate preparation for teachers, it is not so easy to define, in exact terms, the minimum of attainment which can be regarded as sufficient. Much will always depend upon personality, upon general alertness of mind, and aptitude for teaching. The best of teachers learn with their pupils, and it will sometimes happen that one who knows too little of his subject will teach it better than another who knows more. Nevertheless, it remains broadly true, and should never be forgotten for a moment, that what the teacher most needs is to be a master of his subject. With the sense of all-around mastery come independence of judgment and the right kind of self-assurance. Without this sense the attempt to follow someone else's method, however good the method may be in the hands of its inventor, can never produce the best results.

To be ideally prepared for giving instruction in a modern language, even in a secondary school, one should have, aside from the ability to teach and the general culture necessary to secure the respect and attachment of pupils, a thoro practical command of the language to be taught, a solid knowledge of its literature, and a first-hand acquaintance with the foreign life of which the literature is the reflection. To be decently prepared, he should, at least, have read so much in the recent literature of the language that he can read about as easily as he would read matter of the same kind in English. He should have studied the principal works of the great writers, and should have taken a course in the general history of the literature. He should know thoroly the grammar of the language

in its present form. If he has some knowledge of the historical development of forms, such knowledge will help him in his teaching, especially in the teaching of French to pupils who have studied Latin. He should be able to pronounce the language intelligently and with reasonable accuracy, tho he may not have the perfect "accent" of one who is to the manor born. He should be able to write a letter or a short essay in the language, without making gross mistakes in grammar or idiom, and to carry on an ordinary conversation in the language without a sense of painful embarrassment. Even this degree of attainment will usually require residence abroad of those for whom English is the mother-tongue, unless they have enjoyed exceptional opportunities in this country. In any case, the residence abroad is greatly to be desired.

In insisting that secondary teachers of a modern language should be able to speak the language with at least moderate facility and correctness, the members of the committee are well aware that they set up a standard higher than that which has very generally been deemed sufficient. But it is a standard to which we must come. Many of the best schools have already come to it. Nor need we fear that such a standard will result permanently to the advantage of the foreign-born teacher in the competition for positions. If we leave out of account cases of exceptional individual talent for teaching, the general principle holds good that the best teacher of a foreign language is a person of the same nationality as his pupils, who is thoroly at home in the language to be taught. The American-born teacher will thus have a substantial advantage over his foreign-born competitor, but he cannot afford to be vulnerable in so vital a point as the practical command of the language in which he undertakes to give instruction.

To many of our teachers residence in Europe will probably seem out of the question. Those who, by dint of thrift and sacrifice, contrive to cross the ocean can now enjoy fine opportunities in the way of summer courses at Paris, Geneva, Jena, Marburg, Greifswald, and elsewhere. The others must content themselves, for the time being, with a somewhat inadequate equipment, the defects of which, however, can be to a great extent remedied by the reading of well-chosen books, by work in American summer schools, and by association with foreigners in this country. It is to be hoped that our colleges and universities will recognize, more largely than they have heretofore recognized, the need of practical courses for teachers of the modern languages.

With respect, now, to the main subject of this section, it is hardly necessary to observe that the teacher who cannot himself speak his modern language should not attempt seriously to teach his pupils to speak it. He should not try to work the "natural method," or any private variation thereof; if he does, he will be almost certain to do more harm than good. He may and should provide memory exercises that exhibit natural

colloquial forms, but in so doing he should be guided by some good manual, and make that the basis of the class-room work. The native German or Frenchman will naturally think that success will be easy for him in a "conversation" course, but it is for him to remember that he can accomplish nothing worth while without system; that he must have the proper books; that he cannot comprehend his pupils' difficulties unless he knows English well, and that he can never govern his class unless he has a sympathetic understanding of American character. For the "psychological," and still more for the "phonetic," program special study is necessary, and no one, foreigner or native, should imagine that he can cope with such a method off-hand.

But if the availability and goodness of the several methods described in the preceding section depend mainly upon the fitness of the teacher, they also depend upon the age of pupils, the probable length of the course, and the size of classes. If the study begins in childhood, and the beginner is looking forward to a long and thoro course of the best possible kind, it is obviously the right thing that he devote a large amount of time at first to the acquisition of a faultless pronunciation and an easy command of the colloquial language. He will then have the best possible foundation for literary study. But if he begins later in life and the problem is to realize the maximum of benefit from a limited course, he should devote less time to the colloquial language and proceed more quickly to the study of literature. It is also evident that in classes of considerable size the most efficient colloquial practice cannot be given; the pupils may learn to understand the language (and this is, of course, well worth while), but they will not learn to speak with much facility. If this report were intended to meet ideal conditions, that is, if it were addressed to teachers whose training would permit them to choose freely from the methods that have been described and to combine them with wise discretion, the committee might be disposed (altho in that case, as we have already remarked, advice with regard to method would hardly be needed) to make some such recommendations as the following: For very young children, say up to the age of ten, the "natural" or imitative method of the nurse or the governess, with some help, perhaps, from the "psychological" method. For a course of six years, beginning, say, at the age of twelve, a combination during the first three years of the "psychological" and "phonetic" methods, accompanied by some study of grammar; after that a more thoro study of grammar, together with the reading and translation of good literature, supplemented by oral practice in the language and written composition. For a four-years' course, beginning in the high school, we should recommend a similar procedure, the division between the "psychological-phonetic" and the "reading" methods coming, however, somewhat earlier, say, after the first year. In combining the "psychological" and "phonetic" methods the general plan of the former would be followed, while the latter

would be imitated in its treatment of pronunciation and, so far at least as French is concerned, in its use of phonetically transcribed texts. For any shorter course we should advise the "reading" method, accompanied, however, by scientific training in pronunciation, drill in the rudiments of grammar, and a moderate amount of oral practice.

Recognizing the somewhat idealistic character of these recommendations, the committee will present farther on a scheme of secondary courses, with suggestions relating thereto, which are meant to be adapted to existing conditions. First, however, it is necessary to deal briefly with another subject, or rather with two closely related subjects, which are more or less involved in any consideration of the modern languages in secondary education.

SECTION V. MODERN LANGUAGES IN THE PRIMARY GRADES; THE EXTENSION OF THE HIGH-SCHOOL COURSE

In a number of American cities modern-language instruction, mainly German, has already been introduced in the primary[1] grades of the public schools, and the propriety and value of such instruction have been warmly debated in the newspapers and in local educational circles. On the one hand, it is urged that in any community where Germans preponderate or constitute even a large minority of the taxpayers, they have a right to demand that the German language be taught in the public schools. The reply is made that the primary schools of the Unites States have an important function to perform in preparing children for life and citizenship in an English-speaking country, and that this mission will best be performed if the English language and no other is made the subject and the medium of instruction. To this it is rejoined that the learning of a foreign language in childhood need not prejudice the learning of English or any other important subject, that the rudiments are quickly and easily acquired, and that the early beginning is in accordance with sound pedagogical principles. This line of assertion, in turn, is met with the reply that the primary schools have all they can do in teaching the subjects that are of obvious and undeniable use to everybody, and that the smattering of a foreign language which they can impart serves no educational purpose and is of no practical value in life.

When the issue is thus stated, one sees at once that there is a measure of soundness in all these contentions. The committee feels that it would be futile to attempt here an answer to the question whether it is or is not desirable, in the abstract, that a foreign language be taught in the primary grades of our public schools. The question in its politico-social bearings is a very large one, but it is a question which every community must and will decide for itself in view of local conditions, and the wisdom of its decision must abide the test of experience. We believe, however, that

[1] We use the word "primary" to denote in a general way all grades below the high school.

experience is already sufficient to enable us to formulate certain general principles which should always be kept in view in the practical management of the matter under consideration.

In the first place, if a foreign language is taken up in the primary grades, it should always be as an optional study. This point seems to require no argument. The value of the study is at best so uncertain, so dependent upon circumstances of one kind or another, that the work should not be made obligatory for anyone.

In the second place, it is not worth while, as a rule, that the study of a foreign language be taken up in the primary grades, unless the beginner has at least a prospect and an intention of going on thru the secondary school. The reason for this opinion is that what can be acquired of a foreign language in the primary grades, even with the best of teaching, and under the most favorable conditions, is good for nothing except as a foundation. For while it is true that children learn quickly and easily the rudiments of "conversation" in a foreign tongue, it is also true that they forget them no less quickly and easily. The children of parents who speak German at home, and expect to speak it more or less all their lives, may be taught in the primary school to use the language a little more correctly; but if they leave school at the age of twelve or fourteen, they inevitably drop back into the speech habits of those with whom they associate, and their school training thus becomes, so far as the German language is concerned, a reminiscence of time wasted. The children of parents who speak English at home may get a smattering of German at school; but if they leave school at the age of twelve or fourteen, they soon forget all they have learned.

In the third place, if a foreign language is taught in the primary grades, it should be by teachers who handle the language easily and idiomatically. Classes should be as small as possible, and there should be at least one exercise on every school day. Infrequent lessons in large classes amount to nothing. It is important that the teacher know his pupils intimately and be able to adapt his instruction to their individual needs. The general aim should be to familiarize the learner with the vocabulary and phraseology of the spoken language, and to teach him to express himself readily and correctly in easy sentences. The free use of *Realien* is to be recommended.

In what has just been said we have had in view the usual arrangement of work, in accordance with which the secondary or high school is supposed to begin with the ninth grade (the average pupil being then about fourteen years old) and to extend over a period of four years. Grades below the ninth we have classed as primary. But while this is still the typical arrangement for the country at large, schoolmen have here and there lengthened the high school by extending it downward; in other words, by making provision that some of the solid disciplinary studies of the

secondary period shall begin in the seventh or eighth grade. There appears to be strong argument in favor of this plan. It is urged by thoughtful schoolmen that our American high school has become congested; that the increased requirements of the colleges and the pressing demands of new subjects for "recognition" have given to the secondary school more work than it can do thoroly in the traditional allotment of time. When, as sometimes happens, the colleges are blamed for this state of affairs, and it is suggested that they reduce their requirements for admission, they are able to reply with much force that present requirements, even where they are highest, are none too high, unless we are willing to fall far below the standard of the Old World. The average graduate of an American high school is of about the same age as the average graduate of a German gymnasium, but the latter is farther along in his studies and better prepared for higher work. We have, therefore, to consider the problem of strengthening the preparatory course, while recognizing that the ordinary four-year curriculum can bear no further burdens, and should, if anything, be simplified. Of this problem the obvious solution is to begin the proper work of the high school at an earlier date. Instead of dividing our educational years into eight primary, four secondary, and seven or eight higher, we should divide them into six primary, six secondary, and six higher.

It is probable, then, that the six-year high-school course will meet with increasing favor, for the idea is a good one. At the same time we can not expect that the now usual organization of school work will be changed immediately or even rapidly, and for this reason the model courses to be described below have been drawn up primarily with reference to existing conditions. Our principal object in touching here upon the subject of the six-year secondary curriculum was to prepare the way for an expression of the opinion that, where such extended courses are provided, a modern language can be very advantageously begun in the seventh grade.

Whether Latin or a modern language should come first in a well-ordered course of study is a question upon which teachers differ. It is one of the questions upon which, in the existing state of psychological and pedagogical science, it is just as well not to dogmatize. In fixing the order of studies in any school course, practical considerations of one kind or another will often outweigh general argument. Probably the sanest view of the matter is that it does not make very much difference whether Latin or a modern language precedes, if only the elementary instruction in either case be rightly adapted to the learner's age and mental condition. It is often urged that the discipline afforded by the study of Latin makes the subsequent learning of a modern language easier. This is true, but the converse is no less true. In beginning the serious study of any foreign language there are certain mental habits to

be formed, certain faculties to be called into play and exercised. The pupil must learn how to study. He must become familiar with strange forms and with their equivalent in his own tongue. He must learn what idiom means and how to translate; must learn to observe, compare, and think. For the purpose of this elementary discipline one language is as good as another, if only the teaching be intelligent; and the discipline of the first linguistic study makes the second easier. In general, it is safe to assert that the average boy or girl of twelve will take more kindly to French or German than to Latin. The modern language is easier and more interesting. It seems more real and practical. Progress is more rapid. The value of the Latin has to be taken on trust, that of the modern language is more obvious to the juvenile mind. For the children of twelve the Latin grammar is a very severe study. It means usually for many months little more than a loading of the memory with paradigms, a blind investment of labor for the sake of a mysterious future profit which the learner cannot comprehend. The elementary reading matter is usually dull stuff, devised to illustrate grammar. Up thru Cæsar's *Commentaries* there is almost nothing to touch the feeling, to feed the imagination, to suggest a real connection with the pupil's own life. It is all a grind; in its time and place, to be sure, a very useful grind. We believe in it heartily. But the question is whether for children of twelve it is not best to break the force of the initial impact with Latin by using a modern language as a buffer.

It may also be remarked, finally, that one who wishes to acquire a modern language thoroly will always do well to begin in childhood. The later period of youth is distinctly a bad time to begin. In childhood the organs of speech are still in a plastic condition. Good habits are easily formed; bad habits more easily corrected. The mind acts more naïvely, and the memory is tenacious of whatever interests. Forms of expression are readily mastered as simple facts. Later in life, in proportion as the mind grows stronger, it also grows more rigid. The habit of analyzing and reasoning interferes more or less with the natural receptivity of the child. The fixation of speech habits in the mother-tongue makes it increasingly difficult to acquire even a moderately good pronunciation, and perfection is usually out of the question.

SECTION VI. PROPOSAL OF THREE NATIONAL GRADES OF PREPARATORY INSTRUCTION IN THE MODERN LANGUAGES

Thus far this report has not dealt specifically with requirements for admission to college. In accordance with the idea embodied in the resolution referred to in Section I, we have approached our subject from the point of view of the secondary schools. We have endeavored to state and explain the principles which should be kept in view in order to render our school work in French and German as valuable as possible to

the learner. We have recognized that the secondary school does not exist solely, or even mainly, for the sake of its preparatory function; and what we have said would be in the main true, and we hope valuable, even if there were no colleges. Nevertheless the preparatory function of the secondary school is obviously of very great importance. In practice secondary courses are shaped quite largely with reference to college requirements. The school naturally looks to the college as a regulative influence. It turns to the college catalog, learns what must be done to prepare its pupils for admission, and concludes, not unnaturally, that this is about what ought to be done from an educational point of view. In the absence of any central control of education in the United States, this regulative influence of the college is the most potent agency at our command for creating and maintaining a high standard of secondary teaching. We come, then, to the subject of secondary instruction as related to college requirements.

For the purpose of simplifying the relation between the colleges and the secondary schools, and for the purpose of securing greater efficiency and greater uniformity in the work of the schools, it is hereby proposed that there be recognized, for the country at large, three grades of preparatory instruction in French and German, to be known as the elementary, the intermediate, and the advanced, and that the colleges be invited to adopt the practice of stating their requirements in terms of the national grades.

Explanatory.— The proposed three grades are designed to correspond normally to courses of two, three, and four years, respectively, the work being supposed to begin in the first year of a four-year high-school course, and to proceed at the uniform rate of four recitations a week. The elementary course is designed to furnish the minimum of preparation required by a number of colleges in addition to the Latin and Greek of the classical preparatory course. The intermediate course is designed to furnish the preparation required by many colleges which permit the substitution of a modern language for Greek. The advanced course is designed to furnish the highest grade of preparation of which the secondary school will ordinarily be capable in a four-year course.

With respect to the time required, in years and in hours per week, for the satisfactory completion of the work to be outlined below, it should be said that the committee has no thought of imposing upon the schools an inflexible program. Teachers will continue to make their programs in accordance with their own judgment and convenience. The rapidity with which the proposed work can be done will, of course, vary greatly in different schools, with the age and aptitude of pupils, the size of classes, the efficiency of teaching, and according as the beginner of French or German has or has not studied Latin. It makes no small difference whether the modern language is begun in the first year or in

the third year of the high-school course. In attempting to draw up model courses, however, the committee obviously had to make some definite assumption with regard to the time of beginning and the number of recitations per week. It was also necessary to provide for the case of the work beginning in the first year, since many of our best schools already have four-year courses in German or French, or both. It is clearly desirable that such courses be made as good as possible, and that they have a recognized place and value in our general scheme of requirements for admission to college.

With regard to the four recitations per week, let it be observed that that number has been made the basis of our calculations, not because the committee prefers it to five, or wishes to recommend it to the schools instead of five, but because it is believed to be the smallest number that will permit the proper completion of the work proposed, if the work begins in the first year. When a modern language is begun in the third year of the high school, it may be possible to complete the intermediate course in two years at the rate of five recitations a week, and the elementary course in proportionally less time. Where French is taken up in the last year of the classical preparatory course, it may be possible sometimes to meet the elementary requirement in one year at the rate of five recitations a week. But this will almost never be possible in the case of German, and in general the committee does not recommend one-year courses. The attempt to meet the elementary requirement in one year will result usually in a cramming process, with neglect of that thoro drill upon the rudiments which is necessary for a good foundation.

In drawing up model courses the committee has had in view the needs and the conditions of the United States at large.[1] The work of the subcommittee charged with the matter was first submitted for criticism and suggestions to some two hundred secondary teachers of known ability and experience. It was then carefully revised in the light of the information and opinions gathered, and finally ran the gauntlet of thoro discussion in the Committee of Twelve. It is believed to represent the best intelligence of the country; to set a standard which is high, but not too high; and to be thruout entirely practicable. Teachers who do not find their own ideas perfectly expressed by the scheme will please

[1] In the spring of 1896 representatives of Harvard, Yale, Princeton, Columbia, Cornell, and the University of Pennsylvania met in New York and, in conference with representatives of a number of prominent eastern preparatory schools, agreed upon a scheme of uniform requirements which has since been accepted by the institutions concerned. The modern-language conference framed an elementary and an advanced requirement in French and in German. The elementary requirement of the New York conference is substantially the same as that proposed by this committee, and its advanced requirement is nearly identical with our intermediate requirement. Slight differences appear in phraseology, in estimates of time required, and in the number of pages suggested for reading. But these differences are insignificant. It is believed, therefore, that the six prominent institutions which have already made so good a beginning in the unification of entrance requirements will have no difficulty in adapting their statements to the scheme which is here proposed for the country at large.

remember that the committee had to find its way among a multitude of counselors.

RECOMMENDED COURSES OF STUDY

SECTION VII. THE ELEMENTARY COURSE IN GERMAN

A. THE AIM OF THE INSTRUCTION

At the end of the elementary course in German the pupil should be able to read at sight, and to translate, if called upon, by way of proving his ability to read, a passage of very easy dialog or narrative prose, help being given upon unusual words and constructions, to put into German short English sentences taken from the language of everyday life or based upon the text given for translation, and to answer questions upon the rudiments of the grammar, as defined below.

B. THE WORK TO BE DONE

During the first year the work should comprise: (1) careful drill upon pronunciation; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of everyday life, of adjectives, pronouns, weak verbs, and the more usual strong verbs; also upon the use of the more common prepositions, the simpler uses of the modal auxiliaries, and the elementary rules of syntax and word order; (4) abundant easy exercises designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (5) the reading of from 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read.

During the second year the work should comprise: (1) the reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in the translation into German of easy variations upon the matter read, and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use his knowledge with facility in the formation of sentences, and, secondly, to state his knowledge correctly in the technical language of grammar.

C. SUGGESTIONS TO THE TEACHER

The following paragraphs are submitted in the interest of good teaching, and not in the interest of the most expeditious preparation for college. It is well known that a capable boy or girl can be crammed for a college examination in any subject in much less time than a proper training in the subject would require. Here, however, we are concerned with the proper training. The college-entrance examination is admittedly an imperfect test of attainment in a modern language. Where candidates are numerous and the time limited, the examination is necessarily in writing; and then the only available test of the ability to read is the ability to translate, while pronunciation and readiness of speech are not tested at all. It is evident, then, that a good symmetrical training in the secondary school must keep in view more things than are likely to be "required" of the candidate at his examination for admission to college. In what follows we shall take up the more important points that are involved in the teaching of beginners, and make some practical suggestions — suggestions that are by no means intended to prescribe a routine, but rather to state and explain guiding principles.

1. *Pronunciation.*— It is hardly necessary to say that the first matter of importance for the beginner is the learning of a good pronunciation. Drill upon the subject should

be kept up steadily and inexorably until right habits are firmly fixed; because wrong habits formed at the outset are very persistent and very difficult to correct. In attempting to imitate his teacher's utterance of the strange German sounds the learner will at first neither hear nor reproduce correctly, but will utter rough approximations of his own. It is necessary to train both his ear and his vocal organs. In doing this most teachers rely only upon oft-repeated imitations of their own pronunciation; and this is the best reliance, always supposing that the model itself be good. What usually happens, however, is that teachers cease or slacken their drill too soon. They find it dull business. After correcting some faulty utterance a score or two of times, they conclude that the result obtained will "do," that it is the best obtainable, that practice will make perfect — in the future. But the learner, being no longer regularly brought to book for his faults, perpetuates them, and makes no further progress except to pronounce badly with greater facility. In this way is acquired the slovenly pronunciation with which too many leave school.

The opinion is sometimes expressed that it is not worth while to take great pains in the teaching of pronunciation, since perfection is out of the question. The argument is that American youths will not learn in school, however they may be taught, to pronounce German as Germans pronounce it; and that, since they will speak badly anyway, the question of more or less cannot greatly matter. But this is not the right attitude. For, altho one who is not a German will very rarely learn after childhood to use the organs of speech precisely as Germans use them, so that his pronunciation will ring absolutely true, still any boy or girl of average apitude may, by careful attention to the subject, acquire a pronunciation so good that it will be pleasing rather than displeasing to a cultivated German ear; just as, in the case of Germans learning English, that which is called the foreign "accent" may be reduced to such minute proportions that it does not offend, tho it is noticeable. Now, this is a result worth working for; but it can only be obtained when the teacher is interested in pronunciation and well informed with regard to it. And right here comes in the great value of a knowledge of phonetics. Without such knowledge the teacher's only resource is the imitation of himself as model; his own personal habits of utterance become the standard of the class. But his habits may not be the best. If an American, he may have received a faulty training; if a German, he may have dialectic peculiarities which should not be taught to a class. One who knows just how the German sounds are produced, and how they differ from the English sounds with which they are most apt to be confounded, has a great advantage in teaching pronunciation. If he hears a faulty utterance, he will know what is the matter and can correct it in the most effective way. If he knows something of German dialects, of provincial or local peculiarities of pronunciation, of the nature and claims of the so-called standard pronunciation, he will know what "correctness" means and will be able to teach more intelligently. And, what is most important of all, for one who has a scientific interest in pronunciation the class-room drill upon the subject will not be a dull, mechanical routine, but a highly interesting employment. He will himself learn much incidentally, and will make his teaching of pronunciation useful to his pupils, not only for German, but also for English.

It is, therefore, very much to be desired that teachers of German in the secondary schools be qualified to deal scientifically with the subject of pronunciation. For this purpose it is not at all necessary that they be accomplished phoneticians. A very rudimentary knowledge of general phonetics will suffice. Of greater importance is it to have at hand, and to have carefully studied, a good treatment of the special problems of German English phonetics.[1]

[1] Such a treatment can be found in Hempl's *German Orthography and Phonology* (Boston, 1897). The second "book" of Professor Hempl's work gives, in chap. 1, a sufficient introduction to general phonetics, with bibliography on p. 61; then, in chap. 2, a scientific description of German speech sounds. Chap. 3 discusses such topics as "A Standard of Pronunciation," "Stage Pronunciation," "The Best German," "The Difference between German and English Pronunciation," and, very fully, "The Values of the

2. *The memorizing of colloquial sentences.*— If there is any point upon which progressive teachers of living languages the world over have lately been coming to an agreement, it is that, in any course of study making the slightest pretension to thoroness, the proper starting-point in teaching is the vocabulary and phraseology of the language as represented in its everyday forms of expression. It is, of course, possible to learn to read a language with some facility and still not be able to utter a sentence in it intelligibly or to understand a sentence uttered by another; in short, without acquiring any feeling for the language in its characteristic modes of expression. Scholars and men of science who find it necessary in their work to read a number of foreign languages can very quickly, by the aid of grammar, dictionary, and translation, reach a point at which they can "make out the sense" or "get the drift" of an article or a pamphlet. But this is not learning the language any more than "picking up" a few tunes on the piano is learning music. Such reading, tho better than nothing and useful for certain purposes, is unsatisfactory. In the field of *belles-lettres*, where so much depends upon style, upon niceties of expression, and the subtle association of ideas, it is extremely unsatisfactory. The school, in dealing with languages so important as Germăn and French, should aim at something better. It should aim to be thoro; to begin in the best way, and lay a good foundation.

For literary appreciation — that is, for reading of the most profitable kind — one needs before all things a sensitive feeling for the language. One needs the sense of being at home in it. In teaching, this principle should be recognized from the outset. The learner's knowledge is to be made second nature. His facilities and organs must be taught to respond instantly and naturally to the foreign symbols, whether they are seen or heard. Idea and form of expression must become so intimately associated that the one suggests the other without any intervening process of ratiocination. To accomplish this, there is no kind of drill so good as the memorizing and frequent repetition of easy colloquial sentences. Such sentences can be given out and learned without any attempt at grammatical analysis and quite in advance of the pupil's grammatical knowledge. To know the meaning of *es thut mir leid*, and to be able to handle the sentence appropriately, it is not at all necessary that one be able to parse a single one of the words. It is to be borne in mind that psychologically the unit of speech is the sentence or the phrase, and not the individual vocable. Thoughtful teachers sometimes object to this form of drill on the ground that it is mere memory work, that it does not teach the pupil to think or to reason. This, however, is not a valid objection. Such drill does much more than to load the memory. It develops aptitude by making psychological reactions instantaneous; in short, by creating *Sprachgefühl*. Its value has some analogy to that of the finger exercises of the incipient pianist.

It is obviously important that what is given out to be learned in this way should consist of nothing but natural, oft-recurring forms of expression. The pupil is to learn how Germans actually say things, and not how they might possibly say something which no one would ever have occasion to say outside the class-room. The ideal condition is, of course, that the teacher have such a command of colloquial idiom that he will be able to furnish the necessary materials from the resources of his own knowledge. It will, then, be best that the pupil's repetitions be elicited by questions addressed to him in German; in other words, that the drill take the form of short dialogs without the use of English. But, as we have already intimated, the teacher who does not command the language should not attempt this, but follow a book or note down suitable sentences from

Letters." Bibliography, on p. 107. From the works there mentioned we select, as likely to be most useful to the teacher (aside from Professor Hempl's own book): Grandgent's *German and English Sounds* (Boston, 1892); Brandt's *German Grammar* (second part) (Boston, 1888); Vietor's *German Pronunciation*, 4th ed., 1890 (Lemcke & Büchner, 812 Broadway, New York, American agents); also Vietor's German essays, *Die Aussprache des Schriftdeutschen*, 1890, and *Wie ist die Aussprache des Deutschen zu lehren?* 1893. It is hardly necessary to say that the most widely used school grammars deal very briefly and superficially with the subject of pronunciation, and are an insufficient reliance, even when free from positive error.

his reading of realistic stories and plays. Such sentences may then be given out to be learned and repeated frequently, the teacher giving the thought in English.[1]

This is, perhaps, an appropriate place to say a word upon the subject of memorizing poetry, a kind of drill which is highly thought of and largely practiced by many teachers. The argument in its favor generally takes some such form as this: Boys and girls are apt to memorize easily, and they must memorize something; then why not have them memorize gems of poetry and great thoughts of great writers rather than the banalities of ordinary discourse? But this argument is fallacious. The object of the drill in colloquial German is, as we have already remarked, not to load the memory with things supposed to be highly valuable in themselves, but to create an instinctive feeling for the language in its usual and natural modes of expression. Now poetry, as the language of emotion, is a more or less artificial — often a highly artificial — form of expression, and it is better that the natural become lodged in the mind first. The beginner who has learned to recite "Sah ein Knab' ein Röslein stehn, Röslein auf der Heiden," is hardly in a better, but rather in a worse, position for learning how a German would ordinarily express that idea. It may further be remarked that in simply hearing recitations of poetry in the class-room the teacher can be of little use except to see that his pupils have done their task, which is, to make the best of it, one of his lowest functions; to correct mistakes of pronunciation, and to give points in elocution, if his talent runs in that direction. It is an easy business for him, but it is apt to involve a great waste of valuable time for all except the reciter. Finally, it is not to be forgotten that this kind of exercise, if it is felt as an irksome task, may easily create a positive distaste, instead of a liking, for the gems of poetry. We must remember Lord Byron's pathetic exclamation:

Then farewell, Horace, whom I hated so.

To sum up, we would not be understood as condemning altogether the exercise of memorizing poetry, but we have not thought it of sufficient importance to deserve a place in the scheme of work outlined above. At any rate, it should not be made much of in the early stages. The poems given out for committing to memory should be few and short, and selected with reference to their simplicity and naturalness of expression. The teacher who omits the exercise altogether during the first year will make no great mistake. The recitation of well-chosen dialogs, with the parts assigned, is a better exercise, and, we believe, is usually found more interesting to learners.

3. *Grammar.*— It is assumed that simple exercises in colloquial German will begin with the very first lesson and take a portion of each recitation period, even when the pupil is learning the alphabet and becoming familiar with the values of the letters. It goes without saying that the sentences learned should occasionally be written down, as well as often repeated orally. Practice in writing German from dictation is helpful in learning to spell, and should be kept up for some time. It may, however, be discontinued earlier than in case of French, because German spelling is much easier to learn than French.

Whether the script letters should be learned at the same time with the print letters and regularly used in all written work is a question upon which opinions differ. On the one hand, it is urged that the script letters are not at all difficult to master, and that the use of them facilitates learning to spell; that such spellings as *musz*, *müssen*, *Herz*, *sitzen*,

[1] For reasons sufficiently obvious the committee does not undertake to recommend particular American text-books for class use. There are a number of publications from which material more or less suitable can be culled. The test in choosing is whether a sentence represents (1) a natural and (2) a usual or oft-recurring form of expression. A scientific manual of spoken German, on the general lines perhaps of Sweet's *Elementarbuch des gesprochenen Englisch*, is a desideratum. Worthy of recommendation for its thoro trustworthiness in respect of idiom, and equally good for German and French, is the German edition of Storm's *Dialogues français*, i. e., *Französische Sprechübungen* (Leipzig, 1888). For an excellent theoretical discussion of colloquial German, containing many useful hints to the teacher, we call attention to Wunderlich's *Unsere Umgangssprache* (Weimar, 1894).

and others come more easily in the German than in the Roman script. It is also urged that, as Germans use the script in their ordinary writing, those who are studying the language should learn to use it. The opposing arguments are that there is nothing educational or practically useful about learning to write the German script; that for Americans it is quite sufficient to be able to read it, in case they should some time get a letter written in it; that boys and girls of high-school age have usually formed their hand in English, and that, unless great pains be taken with them at the start — that is, unless the teacher be both able and willing to teach penmanship for its own sake — they are almost sure to learn to write the script in an ugly un-German hand, like nothing ever met with outside the class-room. From this it is clear that there is something to be said upon both sides. Upon the whole, the committee is of the opinion that the use of the German script in the schools should not be regarded as a matter of great importance, and should never be required at a college examination. Teachers who write it well, and are willing to take the time to teach it well, may very properly insist upon it. Others will be upon safe ground if they permit the use of the Roman letters in all written work. In that case, however, they should sooner or later give their pupils some practice in reading German handwriting.

It is assumed that learners who are of high-school age will take up the study of grammar after a few preliminary lessons. But for several weeks the grammar lessons should be short and easy, so as to allow an abundance of time each day for colloquial exercises and drill upon pronunciation. As the course proceeds, the study of grammar and the doing of exercises directly related to the study of grammar may properly be allowed to absorb an increasing portion of the time, but the colloquial practice should be kept up. In the teaching of grammar the most important principle to be kept in view is that the grammar is there for the sake of the language, and not the language for the sake of the grammar. The recitation of paradigms, rules, and exceptions is always in danger of degenerating into a facile routine, in which there is but little profit. The important thing is not that the learner should acquire facility in telling off paradigms, quoting statements, and explaining principles according to the book, but that he should acquire facility in understanding and using the language. The maxim should be: Little theory and much application. It is of small use to be able to state correctly the principle of adjective declension, so long as the pupil, in attempting to apply the principle in a simple case, is obliged to stop and think, to recall his grammar, and perhaps to guess after all. The right forms must be so bred into the blood that they come naturally from tongue and pen. This, of course, requires an endless amount of repetition, which may at times become tedious. But the time spent upon this elementary drill is well spent and tells for good thruout the course. Teachers should not be in too great haste to get to reading good literature.

The first difficulty of practical importance in teaching German grammar relates to the gender and declension of nouns. If the attempt is made to master the gender and declension of every noun that is met with, either progress will be very slow (as in case of German children learning the mother-tongue), or the learner's memory soon becomes overtaxed. Trying to remember everything, he soon ceases to remember anything with absolute confidence. The best way to deal with this difficulty is to concentrate attention from the start upon those nouns that belong to the language of everyday life — the names of familiar objects, relationships, and ideas — to make sure of these and let the others go. A list of such nouns can be made out which need not contain more than, say, three hundred words. The pupil who at the end of a two-years' course has really learned that number of nouns, so that the right gender and the right plural come to him instantly, has done quite enough. More should not be expected by the college examiner, so far as concerns those nouns the gender and declension of which cannot be determined by inspection. It is, of course, assumed that the candidate will know about nouns in

-chen, -lein, -ei, -heit, -keit, -in, -schaft, -ung. Whether he knows any other rules for gender is not very important.

After the inflection of the noun the other grammatical topics that require the most attention are the inflection of the adjective, the forms of the strong verbs and modal auxiliaries, the use of prepositions, and the subject of word-order. In dealing with these and the minor difficulties of German grammar it is customary to rely, first, upon grammatical exercises — that is, the translation from German into English and from English into German of collections of sentences devised or selected for the express purpose of illustrating some grammatical point; and, secondly, upon drill connected with the German reading lesson. Both these resources are good, if properly handled, and neither should be neglected. To do its proper work the grammatical exercise should not be simply worked thru once and then dismissed, but reviewed and repeated until the right forms come instantly from the tongue and pen. From this it follows that the sentence of the grammatical exercise, no less than those learned in colloquial practice, should represent natural forms of expression — things that Germans say or might say under easily supposable conditions. It used to be thought — and perhaps some teachers and text-book makers still think — that anything grammatical will do for teaching grammar. And so, perhaps, it will; but it is possible to teach the grammar at the expense of the language, and the language is what we are after. To ask a learner to upset into alleged German such sentences as: "The pupils' coats and shoes are in the maids' hands," or, "I give warm clothes and red apples to poor little children," is, to say the least, inexpedient. Instead of a help, it is a hindrance to the acquisition of a sensitive feeling for the language. Rather than exercise his wits upon the translation of such English into such German it were much better that the learner should do no English-German translation whatever, but simply read German and learn the grammar by observation and appropriate drill. Perceiving rightly that the translation of bad exercises is a waste of time and positively harmful, some teachers have been led to the position that all English-German translation is out of place in a beginners' course. They argue that one should not be expected to translate into a language until he knows something about it, until he has a certain working capital in the way of a vocabulary, phraseology, and linguistic feeling; that so long as he must look up his words in the vocabulary and painfully and faultily piece them together, according to his understanding of the grammar, it is better for him to occupy himself with German produced by those who know the language. This reasoning is not altogether unsound, but properly applied it does not lead to the rejection of all English-German translation in the early stages of study. On the contrary, such translation is itself highly useful in acquiring that larger working capital which is desired. All that is necessary is to avoid difficult or independent translation. Thruout the elementary course the English-German translation should consist of little else than easy variations upon a German text already studied. The German *Vorlage* should furnish or suggest substantially all that the learner needs to know, previous acquirements being, of course, taken into consideration. Here the maxim should be: A great deal of the easy rather than a little of the difficult.

We come now to the subject of drilling upon the reading lesson. There are various kinds of questions that can be asked about a text, but three types are prominent in the practice of teachers. In the first type the questions call for the recitation of paradigms and rules and the explanation of grammatical principles. In the second type the questions call for the translation into German of English sentences based upon the text. In the third the object is to draw the pupil out and induce him to talk about what is said in the text. To illustrate, supposing the text in hand to be, *Der See macht eine Bucht ins Land:*

1. Decline *der See.* What is the meaning of *die See?* Decline *die See.* Give the principal parts of *macht.* Inflect *macht* in the present indicative active. Give a synopsis

of its tense in the indicative, first person singular. Why is the accusative used after *in?* Decline *Land.* What is the difference between *Lande* and *Länder?*

2. How would you say in German: The lake is quiet. The sea is quiet. My home is on the lake. I see a ship on the sea. There are many lakes in Switzerland? Give the German for: I made. I have made. I shall make. What are you making? Paper is now made of wood. Would it do to say *eine Bucht im Lande?* How would you say: He is coming to land. I am going into the country. I live in the country. That is the case in all lands except the Netherlands?

3. *Was macht der See? Welcher See ist gemeint? Wo befindet sich dieser See? Von welchem Lande ist hier die Rede? Waren Sie je in der Schweiz? Was für eine Regierung hat die Schweiz?*

Now, the best teaching will make some use of all these types of drill questions, but more of the second than of the first or third. The objection to an exclusive, or even a predominant, use of the first is that it teaches the pupil to "rattle off" paradigms and rules, but not to understand or to use the language. Instead of learning to think in German, as the phrase is, he learns to think grammar in the terms of his text-book. Every college examiner is acquainted with the youth who will write *er hat gekommen* and then, on demand, give correctly the rule for the use of the auxiliaries of tense. What is needed in his case is not more practice in repeating the rule, but more practice in writing and saying *er ist gekommen.* The objection to an exclusive use of Type 3 is that it does not specifically teach grammar at all. In Types 1 and 2 the questions may, of course, be put in German instead of English. It is to be observed, however, that the German grammatical terms are rather difficult to learn and do not come under the head of "every-day forms of expression." The principal value of grammatical drill conducted in German is to teach the learner to handle the sentence. So far as the vocabulary is concerned, he might better be learning something else.

4. *Reading matter.*—In outlining the work of the elementary course we have recommended that, aside from the German-English exercises of the grammar, the reading matter of the first year consist of graduated texts from a reader. This is the usual practice, and it certainly has some argument in its favor. The advantage of a reader is that it offers variety, introduces the learner to different styles, and leads him gradually from that which is very easy to that which is more difficult. Some teachers, however, prefer to make no use of a reader, but to pass directly from the grammar to complete stories having some literary value. They urge that such reading is more interesting and profitable than the disconnected texts usually found in readers. Others, while approving the use of a reader, will prefer to drop it earlier than our scheme proposes, and to read at least one complete story during the first year. Questions of this kind are not very important; and there are no general principles on which to decide them. Teachers must decide according to the character of their classes. Fortunately there is now no lack of suitable material. We have several very good readers and a large number of *Märchen, Geschichten, Erzählungen,* and *Novellen,* published both separately and in collections, and all annotated for beginners.

In choosing from the mass of literature available for the second year the aim should be, of course, to find that which is interesting to the young, wholesome, well written, and not too difficult. It is natural to begin with the fairy stories, or *Märchen,* in which Germany is so prolific, but pupils of high-school grade should not be kept too long on a diet of *Märchen.* If, at the end of the elementary course, the pupil is to be able to read easy narrative prose at sight, it is necessary that he have practice in reading different styles. Lively, realistic narrative, with plenty of dialog, is to be preferred. The German *Märchen* is apt to appear childish to American boys and girls. On the other hand, teachers often complain that most of the tales furnished by conspiring editors and publishers are more or less mawkish love tales, and they sigh for vigorous stories of adventure, with the grand passion left out or made little of. This is a demand which future

editors may well keep in view. Meanwhile we must remember that the Germans are a more sentimental people than the Americans, and that one of the objects for which we study German in school is to learn what the Germans are like.

Stories suitable for the elementary course can be selected from the following list:[1] Andersen's *Märchen* and *Bilderbuch ohne Bilder;* Arnold's *Fritz auf Ferien;* Baumbach's *Die Nonna* and *Der Schwiegersohn;* Gerstäcker's *Germelshausen;* Heyse's *L'Arrabbiata, Das Mädchen von Treppi*, and *Anfang und Ende;* Hillern's *Höher als die Kirche;* Jensen's *Die braune Erica;* Leander's *Träumereien* and *Kleine Geschichten;* Seidel's *Märchen;* Stökl's *Unter dem Christbaum;* Storm's *Immensee* and *Geschichten aus der Tonne;* Zschokke's *Der zerbrochene Krug.*

Good plays adapted to the elementary course are much harder to find than good stories. Five-act plays are too long. They require more time than it is advisable to devote to any one text. Among shorter plays the best available are perhaps Benedix' *Der Prozess, Der Weiberfeind,* and *Günstige Vorzeichen;* Elz' *Er ist nicht eifersüchtig;* Wichert's *An der Majorsecke;* Wilhelmi's *Einer muss heiraten.* It is recommended, however, that not more than one of these plays be read. The narrative style should predominate. A good selection of reading matter for the second year would be Andersen's *Märchen*, or *Bilderbuch*, or Leander's *Träumereien*, to the extent of, say, forty pages. After that such a story as *Das kalte Herz* or *Der zerbrochene Krug;* then *Höher als die Kirche* or *Immensee;* next a good story by Heyse, Baumbach, or Seidel; lastly *Der Prozess.*

A minor question which sometimes exercises the mind of the teacher is the question of the special vocabulary *vĕrsus* the dictionary. The obvious advantage of the special vocabulary is that it is very much more convenient for the learner. A well-known schoolman, in writing to the committee upon this subject, sums up his views in the proposition that "dictionaries are a nuisance." Nor is it easy to find any valid pedagogical objection to the use of a properly prepared special vocabulary. The objection most often urged is that in using a special vocabulary the scholar does not learn, nor try to learn, what the word really means in and of itself, but only what it means in the context where he has found it. It is urged, therefore, that before he can become independent, and acquire scholarly habits of study, he must emancipate himself from the special vocabulary and learn to use the dictionary. There is some force in this argument, but not much, for what the learner invariably does in using the dictionary is to pick out, from the various meanings given, the particular one which suits his occasion. To the others he pays no attention. When he comes across the word in another sense, he looks it up again. It is thus a saving of time if he have the right meaning, unincumbered by the others, given him in a special vocabulary. Really the whole question is mainly one of saving time. If, in getting his lesson, the learner could have at his elbow someone who would simply tell him the meaning of the word, that would be better still, if he would but remember what he was told. But there is undoubtedly some truth in the principle that what is acquired with difficulty, that is, with exertion and exercise of judgment, is the more likely to be remembered. Meanings that come easily in footnotes are apt to go no less easily. The whole question is one upon which no fixed rule can be laid down. There is no serious objection to the use of special vocabularies thruout the elementary course, provided the right texts are available in editions provided with vocabularies, but the choice of reading matter should not turn primarily upon this consideration. It is best to provide a course of reading, with variety, interest, and progression, even if, toward the end, the dictionary has to be used.

5. *Translation into English; sight reading.*—In the majority of schools it would appear that, after the first few months, the study of German consists principally in the translation of German literature into English. Translation is the exercise which is felt

[1] In all the reading lists the order is alphabetical. It expresses no opinion with regard to the merit of the texts as compared with one another.

by both teacher and pupil to be the most important, and it is the one, accordingly, which is most insisted upon. It is also the exercise most easily handled. To sit and hold a book while the members of the class translate, one after the other, into class-room English, to correct their more serious blunders, and help them to "get the sense," requires no great amount of preparation, no great expenditure of energy or ingenuity. But while it has its dangers, the profitableness of translation cannot be successfully attacked. Whatever may be true of very young children, one who already knows one language will learn another most "naturally," most expeditiously, and most thoroly by means of comparison with his mother-tongue; and this comparison, as was pointed out in a preceding section, is an important instrument of discipline and culture. Moreover, translation is the most effective and the most readily available means of determining whether the sense of a passage is exactly understood. It is the best detective of mental haziness, half-knowledge, and self-deception. At the same time it should not be forgotten that the principal object of study is not to learn to translate, but to learn to read without translating.

How to deal with translation so as to make neither too much nor too little of it, so as to get the good and escape the evil of it, is not a simple problem for the teacher. It is easy to say that good translation should always be insisted on, and that bad English should never be allowed to go uncorrected. As a counsel of perfection, this is no doubt good. The trouble is, however, that really good translation of real literature is an art requiring literary skill. There must be time for the mental balancing of alternatives, the testing of synonyms, etc. No one can do it off-hand. To expect schoolboys or college students to do it in the ordinary routine of class work is to expect impossibilities. On the other hand, slovenly, incorrect, and unidiomatic translation is worse than a waste of time. The young person who gets into the habit of murdering his mother-tongue in cold blood, under the pretense of learning a foreign language, does himself more harm than good. What, then, is to be done? The practical answer would seem to be this: Between the extremes of atrocious English, which should not be endured, and the really good English, which is unattainable, there is a wide belt of what may be called tolerable English; English which is not excellent from a literary point of view, but is at least clear, grammatical, free from gross improprieties in respect to idiom, and reasonably faithful to the meaning of the original. Such tolerable English is all that can be expected in the ordinary routine of the class-room. It is, however, desirable that the learner become aware that there is a higher ideal, and that he have some practice in trying to reach it. To this end a passage in German text should occasionally be given out for a carefully prepared written translation, with instructions to take time and make the work just as good as possible. Such translations should then be criticised by the teacher and compared with one another in the class. Attention should be called to the small points of idiom, arrangement, choice of words, turn of phrase, etc., which make up the difference between the tolerable and the excellent. In this way the pupil's literary sense will be cultivated; he will become familiar with the idea of translation as an art, and the effect will be to improve gradually the quality of his ordinary work.

The next question is: How long and to what extent should the routine translation of good German into tolerable English be insisted on in the class-room? The answer is: So long as and wherever the teacher is uncertain whether the meaning of the original is understood. If there is complete certainty that the learner *can* translate his passage of German into tolerable English, it is, as a rule, not worth while to have him do it; the time can be used to better advantage. An exception may be made, of course, in the case of pupils who are for any reason unusually backward in their English, or for such as may be suspected of not preparing their lessons. But for capable pupils who have a right attitude toward their teacher and their work, there presently comes a time when the routine translation in class of what they have previously prepared ceases to be profitable. They learn no new German in the process, and they do not improve their command

of English. For A, B, C, and D, who have prepared their lessons and know perfectly well how to translate a given passage, to sit in the class while E actually translates it, means a waste of time. When that stage is reached, it is time to drop the systematic translation of the entire lesson in class, to call only for the rendering of words or passages that are liable to be misunderstood, and to use the time thus gained in some exercise more profitable than superfluous translation.

One such exercise is reading at sight. Since the general aim in the elementary course is to learn to read very easy narrative prose at sight, and not to learn to translate any specified texts, and since the candidate for admission to college will probably be tested upon some text that he has never studied, it is evident that considerable practice should be given in sight reading. Teachers sometimes object to this exercise on the ground that it encourages guesswork and inaccuracy. But the objection is not valid. The object of the exercise is to increase the learner's vocabulary, to make him feel that he can read German that he has not previously studied, and to give him facility in such reading. There is not the slightest objection to his guessing at the meaning of a new word. All our reading is largely a process of divination, and the better we can divine from the context, the better we can read. Of course, the wrong guesses must be corrected, and the teacher is there for that purpose. It is hardly necessary to say that for sight reading the very easiest texts that can be found should be chosen. Grimm's *Märchen* are well adapted for the earliest experiments, then Meissner's *Aus meiner Welt* or Volkmann's *Kleine Geschichten*.

6. *Reproductive translation into German.* — It will be observed that the program of work for the second year of the elementary course provides for practice "in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easily selected passages." This is what the Germans call *freie Reproduktion*, and is one of the most profitable exercises possible. It teaches the pupil to give heed, not only to the meaning, but to the form in which it is expressed; to put thoughts in German with German as a starting-point. The language of the original should, of course, not be memorized verbatim; what is wanted is not an effort of the memory, but an attempt to express thought in German forms that are remembered in a general way, but not remembered exactly. The objection to independent translation from English into German is that for a long time it is necessarily mechanical. The translator has no help except his dictionary and grammar. His translation is mere upsetting. In free reproduction, on the contrary, he instinctively starts from his memory of the original. His thoughts tend to shape themselves in German form. In short, he learns to think in German.

SECTION VIII. THE INTERMEDIATE COURSE IN GERMAN

A. THE AIM OF THE INSTRUCTION

At the end of the intermediate course the pupil should be able to read at sight German prose of ordinary difficulty, whether recent or classical; to put into German a connected passage of simple English, paraphrased from a given text in German; to answer any grammatical questions relating to usual forms and essential principles of the language, including syntax and word-formation, and to translate and explain (so far as explanation may be necessary) a passage of classical literature taken from some text previously studied.

B. THE WORK TO BE DONE

The work should comprise, in addition to the elementary course, the reading of about four hundred pages of moderately difficult prose and poetry, with constant practice in giving, sometimes orally and sometimes in writing, paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; also grammatical drill upon the less usual strong verbs, the use of articles, cases, auxiliaries of all kinds, tenses and moods (with special reference to the infinitive and subjunctive), and likewise upon word-order and word-formation.

C. SUGGESTIONS TO THE TEACHER

The intermediate course is supposed to be the elementary course, plus one year's work at the rate of not less than four recitations a week. Suitable reading matter for the third year can be selected from such works as the following: Ebner-Eschenbach's *Die Freiherren von Gemperlein;* Freytag's *Die Journalisten* and *Bilder aus der deustchen Vergangenheit*—for example, *Karl der Grosse*, *Aus den Kreuzzügen*, *Doktor Luther*, *Aus dem Staat Friedrichs des Grossen;* Fouqué's *Undine;* Gerstäcker's *Irrfahrten;* Goethe's *Hermann und Dorothea* and *Iphigenie;* Heine's poems and *Reisebilder;* Hoffmann's *Historische Erzählungen;* Lessing's *Minna von Barnhelm;* Meyer's *Gustav Adolfs Page;* Moser's *Der Bibliothekar;* Riehl's *Novellen*—for example, *Burg Neideck*, *Der Fluch der Schönheit*, *Der stumme Ratsherr*, *Das Spielmannkind;* Rosegger's *Waldheimat;* Schiller's *Der Neffe als Onkel*, *Der Geisterseher*, *Wilhelm Tell*, *Die Jungfrau von Orleans*, *Das Lied von der Glocke*, *Balladen;* Scheffel's *Der Trompeter von Säkkingen;* Uhland's poems; Wildenbruch's *Das edle Blut.* A good selection would be: (1) one of Riehl's novellettes; (2) one of Freytag's "pictures;" (3) part of *Undine* or *Der Geisterseher;* (4) a short course of reading in lyrics and ballads; (5) a classical play by Schiller, Lessing, or Goethe.

The general principles of teaching set forth in the preceding section apply also to the work of the intermediate course. Translation should be insisted on so far as necessary, but the aim should be to dispense with it more and more. Every expedient should be employed which will teach the scholar to comprehend and feel the original directly, without the intervention of English. Occasional exercises in preparing very careful, written translations should be continued. Practice should be given in reading at sight from authors of moderate difficulty, such as Riehl or Freytag. The "free reproduction" should by all means be kept up. It will be found much more valuable at this stage than independent translation of English into German. In dealing with classical literature thoro literary studies are, of course, not to be expected, but an effort should be made to bring home to the learner the characteristic literary qualities of the text studied, and to give him a correct general idea of the author.

SECTION IX. THE ADVANCED COURSE IN GERMAN

A. THE AIM OF THE INSTRUCTION

At the end of the advanced course the student should be able to read, after brief inspection, any German literature of the last one hundred and fifty years that is free from any unusual textual difficulties, to put into German a passage of simple English prose, to answer in German questions relating to the lives and works of great writers studied, and to write in German a short, independent theme upon some assigned topic.

B. THE WORK TO BE DONE

The work of the advanced course (last year) should comprise the reading of about five hundred pages of good literature in prose and poetry, reference readings upon the lives and works of the great writers studied, the writing in German of numerous short themes upon assigned subjects, independent translation of English into German.

C. SUGGESTIONS TO THE TEACHER

Suitable reading matter for the last year will be: Freytag's *Soll und Haben;* Fulda's *Der Talisman;* Goethe's dramas (except *Faust*) and prose writings (say, extracts from *Werther* and *Dichtung und Wahrheit*); Grillparzer's *Ahnfrau* or *Der Traum ein Leben;* Hauff's *Lichtenstein;* Heine's more difficult prose (for example, *Ueber Deutschland*); Kleist's *Prinz von Homburg;* Körner's *Zriny;* Lessing's *Emilia Galotti* and prose writings (say, extracts from the *Hamburgische Dramaturgie* or *Laokoon*); Scheffel's *Ekkehard;* Schiller's *Wallenstein*, *Maria Stuart*, *Braut von Messina*, and historical prose (say, the

third book of the *Geschichte des dreissigjährigen Krieges*); Sudermann's *Johannes;* Tieck's *Genoveva;* Wildenbruch's *Heinrich.*

A good selection from this list would be: (1) a recent novel, such as *Ekkehard* or *Soll und Haben*, read not in its entirety, but in extracts sufficient to give a good idea of the plot, the style, and the characters; (2) *Egmont* or *Götz;* (3) a short course of reading in Goethe's prose (say, the Sesenheim episode from *Dichtung und Wahrheit*); (4) *Wallensteins Lager* and *Wallensteins Tod*, with the third book of the *Thirty Years' War;* (5) *Emilia Galotti;* (6) a romantic drama, such as *Genoveva* or *Der Prinz von Homburg.* It is assumed that by the time the fourth year is reached, if the preceding instruction has been what it should be, translation in class can be largely dispensed with and the works read somewhat rapidly. Of course, they cannot be thoroly studied, but thoro literary study belongs to the college or the university. It is not sound doctrine for the secondary school that one work studied with the painstaking thoroness of the professional scholar is worth half a dozen read rapidly. In the secondary school the aim should be to learn to read easily, rapidly, and yet with intelligent, general appreciation, somewhat as an ordinary educated American reads Shakespeare. Such a person in reading Shakespeare will find much that he does not fully understand: archaic phrases, obscure allusions, etc. If he were to work out all these things in the manner of a scholar, and go deeply into the literary, historical, and psychological questions involved in a single one of Shakespeare's great plays, it would take a very long time. Nevertheless, he can read the play intelligently in a few hours. An editor's note helps him quickly over the graver difficulties, and when he has done he has a good general idea of the work, and has been greatly profited by the reading of it.

The other lines of work suggested for the advanced course appear to require no further comment. They explain themselves, and grow naturally out of what has gone before.

SECTION X. THE ELEMENTARY COURSE IN FRENCH

A. THE AIM OF THE INSTRUCTION

At the end of the elementary course the pupil should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below.

B. THE WORK TO BE DONE

During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles, and pronouns; the use of personal pronouns, common adverbs, prepositions, and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction

of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Suitable texts for the second year are: About's *Le roi des montagnes*, Bruno's *Le tour de la France*, Daudet's easier short tales, La Bédollère's *La Mère Michel et son chat*, Erckmann-Chatrian's stories, Foa's *Contes biographiques* and *Le petit Robinson de Paris*, Foncin's *Le pays de France*, Labiche and Martin's *La poudre aux yeux* and *Le voyage de M. Perrichon*, Legouvé and Labiche's *La cigale chez les fourmis*, Malot's *Sans famille*, Mairet's *La tâche du petit Pierre*, Mérimée's *Colomba*, extracts from Michelet, Sarcey's *Le siège de Paris*, Verne's stories.

C. SUGGESTIONS TO THE TEACHER

The suggestions already offered upon the teaching of elementary German are, in the main, equally applicable to the teaching of elementary French. While each language has its own peculiar difficulties that require special attention from the teacher, the general principles that should regulate the work are the same for both. To avoid needless repetition, we refer the reader back to what is said in Section VII, C, and content ourselves here with adding a few further observations which may be regarded as supplementary.

The educational value of the study of French in cultivating habits of careful discrimination, of mental alertness, of clear statement, must never be lost from view, and the expediency of an exercise must often be determined by its utility in attaining these ends. The knowledge gained in the secondary school alone can rarely be of immediate commercial value, but it should be a most serviceable foundation for later acquirements, and the advocates of oral methods may fairly lay some stress on this consideration. The demand for more spoken French in the class-room rests chiefly, however, on other grounds, which may be summarized as follows:

1. Tongue and ear are most efficient aids to the memory, and he who depends on eye alone deprives himself of indispensable allies.

2. Oral work gives vivacity to the class, stimulates the pupil by active participation, and encourages him by making him feel that he is gaining a practical command of the language.

3. In reproducing French sentences several can be spoken in the time needed to write one.

4. The hearer is compelled to grasp the sentence as a whole, while the reader is apt to dwell on separate words, distorting and often reversing the sense, which can only be obtained by making the sentence the unit of thought and interpreting each word in the light of its relation to its fellows.

5. The rapidity of speech also conduces to grasping thought directly from the French with no intermediate English. Many readers really read only the English into which, more or less laboriously, they change the French words. It is needless to dwell on the fact that such readers get their entire thought from a translation, usually a very bad one, and can never have any exact perception of literary excellence in French nor distinguish shades of meaning different from those to which they have been accustomed in English. It is hard to see how such a one can have any vivid conception of a lyric, an oration, or a dialog; nor can he understand how, when translation is required, the proper order is French-thought-English, and not French-English, with the thought last or never.

On the other hand, that time may be economically used, rambling, aimless talking must not be tolerated in the class-room; and a teacher who does not possess a good pronunciation and a ready command of the language generally does far more harm than good by practicing on his pupils. Whatever recommendations the committee has made as to oral work apply only to those teachers who can speak French well.

Especially with beginners should the French spoken be accurately pronounced.

Faults of pronunciation once fixed are very difficult to eradicate. In some places French has been introduced into grades below the high school, and the classes intrusted to teachers unable to pronounce well. Irreparable injury has thus been done. The utmost pains must be taken at the beginning, especially with the vowels; and the separate sounds, and the words containing them, should be pronounced many times by the teacher and repeated by the pupil. For a long time every new word should thus be treated, and, unless a phonetic text is used, the pupil should always hear a new word before he tries to pronounce it.

Careful memorizing and frequent repetition of a few lines of simple prose are helpful and furnish a standard of pronunciation to which new words may be referred. Both for this and for mastering colloquial and idiomatic expressions, word-order, and grammatical forms, it is advised that a small amount of French, preferably simple prose, be carefully memorized the first year. Later, selections should be made for their literary interest.

Most teachers know how they prefer to teach the rudiments of grammar in a given class. We may remark, however, that it is not for the secondary school to spend time over the many pages of exceptions, peculiarities in number and gender, idioms that one rarely sees and never thinks of using, and grammatical puzzles for which each learned grammarian has a different solution, that form so large a part of some grammars. The great universals, however (the regular and the common irregular verbs; negative and interrogative variations; the common use and meaning of moods and tenses; the personal pronouns and their position; the general principles governing the agreement of adjectives, pronouns, and participles; the partitive constructions; the possessives, demonstratives, interrogatives, and relatives; the most common adverbs, conjunctions, and prepositions), should all be thoroly understood by the end of the second year of the high-school study, and subsequent study should give considerable facility in using them.

The verb seems most formidable; but when it is perceived that most forms of all verbs may be treated as identically derived from the "primitive tenses," the difficulties appear less numerous, and when the principle of stem-strengthening under the influence of tonic accent, persisting in the older and more common verbs, is a little understood, the number of really unique forms is inconsiderable.

Translating into English should mean giving in well-chosen language the exact thought and spirit of the original. Thus understood, it is extremely difficult, and should never be attempted by the pupil before the meaning of the original is clear to him. It is then rather an exercise in English than in French. Nothing should be accepted as English which is not English. The teacher who complacently listens while a pupil turns good French into bad English is, to put it mildly, not doing his duty. Translating into English is often the most rapid means of ascertaining whether the pupil has correctly understood the French read, but a few well-chosen questions asked and answered in French, or an abstract in the same language, is often equally effective as a test, and far better as training in French.

Just as English should be English, French should be French; and merely using French words and conforming to grammatical rules do not make a sentence French. At first, sentences formed by pupils should exactly follow French model sentences, being either verbatim reproductions or differing only in simple and immaterial verbal changes. Not until the pupil, by much assimilation of French models, has become imbued with the form and spirit of the language, can he be safely left to his own invention. In choosing reading matter, the tendency is to select something too hard. The teacher adopts a book because it is world-renowned, because it interests him personally, because it teaches a valuable lesson, moral or historical. While all pedagogical roads should lead to the Rome of a broad culture, the attempt to teach literature, æsthetics, history, or morality from a work in which linguistic difficulties dismay the pupil and engross his attention, can only end by making him detest both the book and its lessons. The beginner in French

can be taught these things best in the vernacular; while searching a dictionary to discover whether *fut* comes from *faire* or from *falloir*, he has little leisure to think of the relative merits of literary schools. Give him at first the easiest reading attainable, remembering that simple language does not mean infantile conceptions, nor *vice versa*. Let there be frequent repetition, that he may be encouraged by finding that he can cover a respectable number of lines at a lesson. Entertain no thought of teaching literature until the pupil is quite familiar with ordinary prose and can read page after page of the text assigned with no great need of grammar or dictionary. The classics of dramatic literature may very properly be postponed until the fourth year, and we do not consider them always desirable even then; but a few have been given among texts suitable for the third year in the hope that these rather than others will be selected by teachers who, for reasons of their own, choose to read something of the kind at this stage of the course.

The reading lists are meant to be illustrative simply, not exhaustive. Other texts equally good might no doubt be mentioned under each head. The answers to the committee's circulars indicate clearly that teachers would not welcome a narrow range of prescribed reading, such as teachers of Latin have in their Cæsar, Cicero, and Virgil. A definite curriculum of that kind would no doubt have its advantages, but in the case of the modern languages it is not practicable and, upon the whole, not desirable. The disadvantages would far outweigh the advantages. The mass of available literature is so great, the preferences of teachers and the needs of classes so divergent, that the only safe course is to leave a large latitude of choice. This being so, it has seemed best merely to give examples of the kind of reading appropriate to each year.

SECTION XI. THE INTERMEDIATE COURSE IN FRENCH

A. THE AIM OF THE INSTRUCTION

At the end of the intermediate course the pupil should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thoro knowledge of syntax than is expected in the elementary course.

B. THE WORK TO BE DONE

This should comprise the reading of from 400 to 600 pages of French of ordinary difficulty, a portion to be in the dramatic form; constant practice in giving French paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; the study of a grammar of modern completeness; writing from dictation.

Suitable texts are: About's stories; Augier and Sandeau's *Le Gendre de M. Poirier;* Béranger's poems; Corneille's *Le Cid* and *Horace;* Coppée's poems; Daudet's *La Belle-Nivernaise;* La Brète's *Mon oncle et mon curé;* Madame de Sévigné's letters; Hugo's *Hernani* and *La Chute;* Labiche's plays; Loti's *Pêcheur d'Islande;* Mignet's historical writings; Molière's *L'Avare* and *Le Bourgeois Gentilhomme;* Racine's *Athalie, Andromaque,* and *Esther;* George Sand's plays and stories; Sandeau's *Mademoiselle de la Seiglière;* Scribe's plays; Thierry's *Récits des temps mérovingiens;* Thiers's *L'Expédition de Bonaparte en Égypte;* Vigny's *La canne de jonc;* Voltaire's historical writings.

SECTION XII. THE ADVANCED COURSE IN FRENCH

A. THE AIM OF THE INSTRUCTION

At the end of the advanced course the pupil should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the works read; to put into French a passage of easy English prose; and to carry on a simple conversation in French.

B. THE WORK TO BE DONE

This should comprise the reading of from 600 to 1,000 pages of standard French, classical and modern, only difficult passages being explained in the class; the writing of numerous short themes in French; the study of syntax.

Suitable reading matter will be: Beaumarchais's *Barbier de Séville;* Corneille's dramas; the elder Dumas's prose writings; the younger Dumas's *La question d'argent;* Hugo's *Ruy Blas*, lyrics, and prose writings; La Fontaine's fables; Lamartine's *Graziella;* Marivaux's plays; Molière's plays; Musset's plays and poems; Pellisser's *Mouvement littéraire au XIX^e siècle;* Renan's *Souvenirs d'enfance et de jeunesse;* Rousseau's writings; Sainte-Beuve's essays; Taine's *Origines de la France contemporaine;* Voltaire's writings; selections from Zola, Maupassant, and Balzac.

SECTION XIII. SPECIMEN EXAMINATION PAPERS FOR ADMISSION TO COLLEGE

The complaint is sometimes heard from teachers in the secondary schools — and investigation shows it to be not altogether groundless — that, even at colleges having the same or very similar requirements for admission, the entrance examinations are apt to differ not a little in respect to difficulty and in respect to the general character of the questions asked. To a certain extent this lack of uniformity is inevitable. With the best intentions examiners will differ more or less in their estimate of difficulty and in their choice of test questions. Some will prefer to set a more difficult paper and mark liberally; others to set an easier paper and mark more closely. The only obvious way to bring about uniformity in the papers set would be to intrust the preparation of them each year to a central committee or bureau (say of the Modern Language Association), which should furnish them on demand, in sealed packages and at a fixed rate, to such colleges as might wish to receive them. Such a plan would have much in its favor. Under its operation there would be no room for criticism of particular colleges. The papers would presumably be prepared with very great care; they would improve in the light of criticism, would furnish teachers with a pattern to work by, and so could hardly fail to make for greater excellence and uniformity in the work of our secondary schools. The feasibility of such a plan would depend largely upon the attitude of the colleges, and whether it would work well in practice could only be determined by trial. Difficulties of one kind and another would no doubt arise, but they do not appear in advance to be insuperable. At any rate the plan seems worthy of serious consideration.

Meanwhile, without wishing to imply an exclusive preference for a written as opposed to an oral test (the best plan, wherever practicable, is undoubtedly a combination of the two), the committee has thought it appropriate to close this report with a series of papers designed to illustrate in a general way the kind of test which, in our opinion, the candidate for admission to college may reasonably be expected to pass upon completing any of the courses above described. The papers are by no means offered as perfect models for imitation, but as an approximate indication of what, in our judgment, the college-entrance examination should be. The time required is estimated in each case at about two hours. Unless the contrary is expressly stated, the texts are not supposed to have been previously studied by the candidate.

A. ELEMENTARY FRENCH

I. Translate into English:

(*a*) Lui, penché sur sa chaise, regardait dans la cheminée, les yeux fixes. Et tout à coup, comme on se taisait, il se tourna de mon côté et me dit d'un ton de bonne humeur:

Voici bientôt le printemps, monsieur Florence, nous ferons encore plus d'un bon

tours dans la montagne ; j'espère que cette année vous viendrez plus souvent, car vous avez beau dire, vous aimez ce pays autant que moi . . . .

He ! je ne dis pas le contraire, Georges ; mais à ton âge, dans ta position . . . . Enfin laissons cela . . . . Et puisque tu restes, eh bien, oui, tu as raison, nous irons plus souvent nous promener ensemble dans la montagne ; je suis toujours content d'être avec toi.

À la bonne heure, dit-il en riant, voilà ce qui s'appelle parler.

Et durant plus d'une demi-heure, la conversation roula sur les fleurs de nos montagnes, sur la belle vallée de la Sarre-Rouge, etc. On aurait cru que rien d'extraordinaire ne s'était dit.—*Erckmann-Chatrian.*

(*b*) Le temps était sombre, il tombait une petite pluie de brouillard qui épaississait encore l'obscurité, les becs de gaz brûlaient mal, et leur lumière, réfléchie par les flaques d'eau, éclairait la rue déserte d'une façon incertaine et changeante. Le jeune homme marchait rapidement, son parapluie baissé en avant pour s'abriter de la pluie qui lui frappait dans la figure. Tout à coup, sans qu'il les eût vus venir ou sortir d'une embrasure de porte, il se trouva en face de deux hommes et, surpris de cette brusque apparition, il sauta de côté par un mouvement instinctif et nerveux. Il était à ce moment à une centaine de mètres de chez lui, à l'encoignure d'une ruelle qui descend vers la rue de Charenton.— *Malot.*

(*c*) Un jeune homme plein de passions, assis sur la bouche d'un volcan, et pleurant sur les mortels dont à peine il voyait à ses pieds les demeures, n'est sans doute, ô vieillards ! qu'un objet digne de votre pitié ; mais quoi que vous puissiez penser de René, ce tableau vous offre l'image de son caractère et de son existence : c'est ainsi que toute ma vie j'ai eu devant les yeux une création à la fois immense et imperceptible, et un abîme ouvert à mes côtés.— *Chateaubriand.*

II. (*a*) Write the five principal parts of the three verbs (the forms here given occur in I, *b*) : *vus, sortir, descend.*

(*b*) Write a synopsis of the conjugation (first person singular of each tense) of *se réjouir* and *savoir.*

(*c*) Write the inflection of : the present indicative of *boire* and *faire;* the future of *pouvoir;* the present subjunctive of *prendre.*

(*d*) Write the forms of the demonstrative pronouns.

(*e*) In what ways may the use of the passive voice be avoided in French ?

II. Translate into French :

(*a*) Here is the pen, shall I send it to her ? No ; do not send it to her ; give it to me.

(*b*) Cats and dogs are domestic animals.

(*c*) You must give them some white bread and good coffee, if they have none.

(*d*) The old man is very well this evening, altho he has worked all day.

(*e*) We have just searched for your gloves, but we do not find them in the room where you left them a quarter of an hour ago.

(*f*) Why do we weep for mortals whose life and character we scarcely know ? We always have them before our eyes. Whatever we may think of them, they are surely worthy of our pity.

B. INTERMEDIATE FRENCH

I. Translate into English :

(*a*) Nulle part, à aucune époque de ma vie, je n'ai vécu aussi complètement seul. La maison était loin de la route, dans les terres, écartée même de la ferme dépendante dont les bruits ne m'arrivaient pas. Deux fois par jour, la femme du fermier me servait mon repas, à un bout de la vaste salle à manger dont toutes les fenêtres, moins une, tenaient leur volets clos. Cette Provençale noire, le nez écrasé comme un Cafre, ne comprenant pas quelle étrange besogne m'avait amené à la campagne en plein hiver, gardait de moi

une méfiance et une terreur, posait les plats à la hâte, se sauvait sans un mot, en évitant de tourner la tête. Et c'est le seul visage que j'ai vu pendant cette existence, distraite uniquement, vers le soir, par une promenade dans une allée de hauts platanes, à la tristesse d'un soleil froid et rouge dont les grenouilles saluaient le coucher hâtif de leurs discordantes clameurs. —*Daudet.*

(*b*) Amis, loin de la ville,
Loin des palais de roi,
Loin de la cour servile,
Loin de la foule vile,
Trouvez-moi, trouvez-moi,

Aux champs où l'âme oisive
Se recueille en rêvant;
Sur une obscure rive
Où du monde n'arrive
Ni le flot, ni le vent,

Quelque asile sauvage,
Quelque abri d'autrefois,
Un port sur le rivage,
Un nid sous le feuillage,
Un manoir dans les bois!

Trouvez-le moi bien sombre,
Bien calme, bien dormant,
Couvert d'arbres sans nombre,
Dans le silence et l'ombre
Caché profondément!

—*V. Hugo.*

(*c*) DENISE. Fernand?

FERNAND. Qu'est-ce que tu veux?

DENISE. Où as-tu mis le livre que tu as été chercher pour mademoiselle de Bardannes?

FERNAND. Là, sur la table. Est-ce qu'elle est déjà prête?

DENISE. Pas encore, mais elle achève de s'habiller. (*Elle prend le livre sur la table.*)

ANDRÉ, *entrant, à Denise.* Je n'ai pas pu vous demander tout à l'heure, devant tout ce monde, mademoiselle, si vous êtes tout à fait remise de votre indisposition d'hier qui vous a empêchée de dîner avec les amis qui me sont arrivés, dont deux sont déjà des vôtres. J'espère que ce soir j'aurai le plaisir et l'honneur de vous voir à notre table, ainsi que monsieur et madame Brissot.

DENISE. Oui, monsieur, ma mère m'a déjà fait part de votre aimable invitation.

FERNAND, *à André.* Et moi, je vais monter un peu d'avance le cheval de ta sœur pour le bien mettre à sa main; montes-tu avec nous?

ANDRÉ. Non, nous avons une inspection à faire avec M. Thouvenin.

FERNAND. À tantôt, alors.

II. (*a*) Write a synopsis, in the first person singular, including infinitive, participles, and imperative singular, of the five verbs (see I, *a*): *vécu, tenaient, comprenait, amené, vu.*

(*b*) What are the general principles governing the use of the indicative, conditional, and subjunctive moods?

III. Translate into French:

Tell me, what has kept you from selling that old house, the shutters of which always remain closed? It is quite alone; at night one hears strange noises in it; and little boys who have to pass near it run away without looking at it. I am sorry you did not sell it to M. André when you sold him your farm and your brother's. You will do well to accept what M. André has offered you for it; and I wish you to go and see him this very evening.

C. ADVANCED FRENCH

I. Translate into English:

(*a*) Tous ces dons sont communs aux orateurs; on les retrouve avec des proportions et des degrés différents chez des hommes comme Ciceron et Tite-Live, comme Bourdaloue et Bossuet, comme Fox et Burke. Ces beaux et solides esprits forment une famille naturelle, et les uns comme les autres ont pour trait principal l'habitude et le talent de passer des idées particulières aux idées générales, avec ordre et avec suite, comme on monte un escalier en posant le pied tour à tour sur chaque degré. L'inconvénient de cet art, c'est l'emploi du lieu commun. Les hommes qui le pratiquent ne

peignent pas les objets avec précision, ils tombent aisément dans la rhétorique vague. Ils ont en main des développements tout faits, sorte d'échelles portatives qui s'appliquent également bien sur les deux faces contraires de la même question et de toute question.— *Taine.*

(*b*) Les règles générales ne sont que des expédients mesquins pour suppléer à l'absence du grand sens moral, qui suffit à lui seul pour révéler en toute occasion à l'homme ce qui est le plus beau. C'est vouloir suppléer par des instructions préparées d'avance à la spontanéité intime. La variété des cas déjoue sans cesse toutes les prévisions. Rien, rien ne remplace l'âme: aucun renseignement ne saurait suppléer chez l'homme à l'inspiration de sa nature.— *Renan.*

(*c*) Phèdre, si ton chasseur avait autant de charmes
Qu'en donne à son visage un si docte pinceau,
Ta passion fut juste et mérite des larmes
Pour plaindre le malheur qui le met au tombeau.

Et si tu parus lors avec autant de grâce
Qu'en ces vers éclatants qui te rendent le jour,
Estime qui voudra son courage de glace,
Sa froideur fut un crime, et non pas ton amour.

Aussi, quoi qu'on ait dit du courroux de Thésée,
Sa mort n'est pas l'effet de son ressentiment,
Mais les Dieux l'ont puni pour t'avoir méprisée,
Et fait de son trépas un juste châtiment.

—*Corneille.*

(*d*) Du Dieu qui nous créa la clémence infinie,
Pour adoucir les maux de cette courte vie,
A placé parmi nous deux êtres bienfaisants,
De la terre à jamais aimables habitants,
Soutiens dans les travaux, trésors dans l'indigence,
L'un est le doux sommeil, et l'autre est l'espérance:
L'un, quand l'homme accablé sent de son faible corps
Les organes vaincus sans force et sans ressorts,
Vient par un calme heureux secourir la nature
Et lui porter l'oubli des peines qu'elle endure;
L'autre anime nos cœurs, enflamme nos désirs,
Et même, en nous trompant, donne de vrais plaisirs;
Mais aux mortels chéris à qui le ciel l'envoie
Elle n'inspire point une infidèle joie;
Elle apporte de Dieu la promesse et l'appui;
Elle est inébranlable, et pure comme lui.

—*Voltaire.*

II. (*a*) Explain the two cases of subjunctive that occur in I, (*c*).

(*b*) Point out two cases of poetic inversion in I, (*d*).

(*c*) Define *aimable* as used in classic poetry and as used in modern prose.

III. Write fifteen or twenty lines of French about the author of one of the preceding selections, or about one of the persons mentioned in I, (*a*).

IV. Translate into French:

The following day, at three o'clock in the afternoon, they came to Surgères. The cardinal was waiting there for Louis XIII. The minister and the king exchanged many affectionate greetings, and congratulated each other on the lucky chance that had rid France of the relentless enemy who was stirring up Europe against her. Thereupon the cardinal, having been informed by Rochefort that D'Artagnan had been arrested, and being eager to see him, took leave of the king, and returned to the house he occupied, near the bridge of La Pierre. There he found D'Artagnan standing without a sword before the door, and the three guardsmen armed.

D. ELEMENTARY GERMAN

I. Translate into English:

(*a*) Ich folgte sogleich dem Boten, und er führte mich in ein kleines Zimmer, das seiner schlechten Einrichtung[1] nach zu den billigsten des Gasthauses gehören musste, Auf einem Bette lag eine schöne, junge Frau mit geschlossenen Augen und totenbleichen,[2] aber edlen und feinen Zügen. Ein Dienstmädchen war mitleidig um sie bemüht,[3] und neben ihr im Bette sass ein etwa dreijähriges, blondlockiges Bübchen, jämmerlich[4] weinend und seine Mutter mit den süssesten Namen rufend und flehentlich[5] bittend, sie möchte doch die Augen aufmachen und ihn wieder lieb haben. Ich hob den kleinen Burschen vom Bett herunter und setzte ihn auf den Boden nieder. Er blieb auch ruhig sitzen, seine grossen, blauen Augen unverwandt[6] auf die Mutter gerichtet. Meine Bemühungen, diese wieder zum Bewusstsein[7] zu bringen, wurden bald mit Erfolg belohnt. Die Frau atmete schwer und schlug die Augen auf, aber sie war zu schwach um auf meine Fragen vernehmlich[8] antworten zu können.—Adapted from *Helene Stökl.*

(*b*) Waldgegend. Vorn rechts ein altertümliches[9] Gebäude; vor demselben ein Tisch mit Stühlen und einer Bank, unter einem Baume; links ein Thor; im Hintergrunde eine Mauer. Vor derselben eine Anhöhe.[10]

HEDWIG (*singt*): Wenn ich ein Vöglein wär'
Und auch zwei Flüglein hätt',—

URSULA (*kommt mit Frühstück, das sie auf den Tisch stellt*): Du bist ja schon früh bei der Hand, mein Kind.

HEDWIG: Sagst du nicht immer: Morgenstund' hat Gold im Mund?

URSULA: Das ist schon recht, dass du mit der Lerche auffliegst, aber die Vögel, die zu früh singen, holt am Abend die Katze.

HEDWIG: Soll ich eine Lerche sein, dann muss ich auch mein Lied für mich haben.

URSULA: Das Lied passt nur nicht an diesem Ort.

HEDWIG: Aber es passt zu meinem Herzen. Ja, alte Ursula, ich wünschte, dass ich ein Vöglein wär', und auch zwei Flügel hätt'.

URSULA: Und wo sollte es dann hinaus?

HEDWIG: Weit, weit weg! Über die Mauer, über die Bäume, über den Wald, über das Feld — in die ferne, schöne Gotteswelt!

II. (*a*) Give the nominative and genitive singular (with definite article) and the nominative plural of *Boten, Füsse, Zimmer, Einrichtung, Hauses, Bette, Frau, Auge, Zügen, Mutter, Fragen, Gestalt.*

(*b*) Decline thruout the German phrases meaning *the new house, my dear friend.*

(*c*) Give the principal parts of *musste, lag, geschlossen, rufend, bittend, möchte, aufmachen, hob herunter, blieb, sitzen, bringen, schlug auf, können.*

(*d*) Give the third person, singular, of each tense in the indicative mode, of *bittend, blieb, schlug auf.*

(*e*) What case is governed by each of the prepositions: *auf, aus, bei, durch, für, in, mit, über, um, von, wegen, zu?*

III. Translate into German:

(*a*) Who is that old gentleman with the white beard?[11] Surely I have seen him somewhere.[12]

1 Einrichtung, *equipment, furnishings.*
2 Bleich, *pale.*
3 Bemüht, *occupied.*
4 Jämmerlich, *piteously.*
5 Flehentlich, *imploringly*
6 Unverwandt, *incessantly.*
7 Bewusstsein, *consciousness.*
8 Vernehmlich, *audibly.*
9 Altertümlich, *ancient-looking.*
10 Anhöhe, *elevation.*
11 Beard, *der Bart.*
12 Somewhere, *irgendwo.*

(*b*) So this is your new house. What a lovely view[1] from this window! But I do not see the old castle[2] of which you told me in your letter.

(*c*) He has lived two whole years in Germany, and has just returned. He speaks German pretty well, but does not seem to have read much.

(*d*) I will do the best I can, but you must not expect too much. Perhaps it would be better if you should go to him yourself.

(*e*) Come now, Hedwig, and eat your breakfast. You are not a bird and cannot fly. And, after all,[3] is it not better to be a pretty girl than a stupid[4] bird?

[1] View, *die Aussicht.* [2] Castle, *das Schloss.* [3] After all, *am Ende.* [4] Stupid, *dumm.*

E. INTERMEDIATE GERMAN

I. Translate into English:

(*a*) Die Wohnungen in den Bädern von L. sind entweder unten in einem Dorf, das von hohen Bergen umschlossen ist, oder sie liegen auf einem dieser Berge selbst, unfern der Hauptquelle, wo eine pittoreske Häusergruppe in das reizende Thal hinabschaut. Einige aber liegen auch einzeln zerstreut an dem Bergesabhängen, und man muss mühsam hinaufkommen durch Weinreben, Myrtengesträuch, Lorbeerbüsche und andere vornehme Blumen und Pflanzen, ein wildes Paradies. Ich habe nie ein reizenderes Thal gesehen, besonders wenn man von der Terasse des oberen Bades, wo die ernstgrünen Cypressen stehen, ins Dorf hinabschaut. Man sieht dort die Brücke, die über ein Flüsschen führt, welches L. heisst, und, das Dorf in zwei Theile durchschneidend, ein Geräusch hervorbringt, als wolle es die angenehmsten Dinge sagen, und könne vor dem allseitig plaudernden Echo nicht zu Worte kommen. — *Heine.*

(*b*) Bernhard schritt durch enge Gassen nach dem Markte. Er fand die Strassen voll von geschäftigen Menschen, die den Fremdling neugierig und forschend ansahen, viele unter ihnen in mangelhafter Bekleidung, mit bleichen und vergrämten Gesichtern. Auch die Häuser waren mit Einliegern[1] überfüllt, noch in den Dachfenstern guckten Kinder-

[1] Einlieger, *lodger.*

köpfe und hing die Wäsche armer Leute. Aus dem engen Höfen hörte er Gebrüll der Rinder, und neben den Hunden liefen grunzende Schweine vor den Hausthüren. Denn viele Landleute waren nach der Stadt geflüchtet und hausten mit ihrem Vieh gedrängt in jämmerlichen Wohnungen. Auch der Marktplatz war mit Bretterbuden und Leinwandzelten[2] besetzt, an welchen armselige Frauen wuschen und kochten und halbnackte Kin-

[2] Leinwandzelt, *canvas tent.*

der auf den Steinen spielten. — *Freytag.*

GESSLER.

(*c*)[1] Nun, Tell! weil du den Apfel triffst vom Baume

[1] The candidate is here supposed to have read Schiller's *Tell.* If he has not, passage (*c*) should be replaced by another, taken from a classic previously studied.

Auf hundert Schritt, so wirst du deine Kunst
Vor mir bewähren müssen. Nimm die Armbrust —
Du hast sie gleich zur Hand — und mach dich fertig,
Einen Apfel von des Knaben Kopf zu schiessen —
Doch, will ich raten, ziele gut, dass du
Den Apfel treffest auf den ersten Schuss!
Denn fehlst du ihn, so ist dein Kopf verloren.

[*Alle geben Zeichen des Schreckens.*]

TELL.

Herr, welches Ungeheure sinnet Ihr
Mir an? — Ich soll vom Haupte meines Kindes —
Nein, nein doch, lieber Herr, das kommt Euch nicht
Zu Sinn. — Verhüt's der gnäd'ge Gott. — Das könnt Ihr
Im Ernst von einem Vater nicht begehren!

II. (*a*) Compare the adjectives *alt*, *kurz*, *bedeutend*, *wild*, *dunkel*, *hoch*, *ober*, *erst*, *deutsch*, *ganz*.

(*b*) Explain the use of *sein* and *haben* as auxiliaries of tense, and put into German: (1) The boy has fallen into the water. (2) He has traveled much, but seen little. (3) I have remained too long. (4) I have been sitting in my room all day. (5) You have slept two hours. (6) The child has fallen asleep.[1]

[1] Fall asleep, *einschlafen*.

(*c*) How do the modal auxiliaries differ in conjugation from ordinary weak verbs, and how from strong verbs? Put into German: (1) I will tell you something. (2) We cannot go. (3) He had to stay at home. (4) I should like to know. (5) She will not be permitted to come. (6) I have not been able to see him.

(*d*) In passage (*c*) explain (1) the plural *Schritt*, (2) the subjunctive *treffest*, (3) the use of the article in *des Schreckens*.

III. Translate into German:

There was once an old goat[1] that had seven kids.[2] One day she had to go out into

[1] Goat, *die Ziege*. [2] Kid, *Geislein*.

the woods to get food[3] for her young ones. So she called them all to her and said: "I

[3] Food, *das Futter*.

must go away now, and shall not come back till evening. You must all stay in the house and not let anyone in till I come home. If the wolf comes, you will know him by[4] his

[4] By, *an*.

rough[5] voice and his black feet." Soon the wolf came and said: "Open the door and

[5] Rough, *rauh*.

let me in. I am your mother and have brought you some cakes." But the kids knew by the rough voice that it was not their mother, and the oldest kid looked out of the window and saw the wolf standing there and told him to go away.

F. ADVANCED GERMAN

I. Translate into English:

(*a*) Die Kunst ist lang, das Leben kurz, das Urteil schwierig, die Gelegenheit flüchtig. Handeln is leicht, Denken schwer, nach dem Gedachten Handeln unbequem. Die Nachahmung ist uns angeboren, das Nachzuahmende wird nicht leicht erkannt. Selten wird das Treffliche gefunden, seltener geschätzt. Die Höhe reizt uns, nicht die Stufen; den Gipfel im Auge wandeln wir gerne auf der Ebene. Nur ein Teil der Kunst kann gelehrt werden, der Künstler braucht sie ganz. Wer sie halb kennt, ist immer irre und redet viel; wer sie ganz besitzt, mag nur thun und redet selten oder spät. Jene haben keine Geheimnisse und keine Kraft; ihre Lehre ist wie gebackenes Brod, schmackhaft und sättigend für *einen* Tag: aber Mehl kann man nicht säen, und die Saatfrüchte sollen nicht vermahlen werden. Die Worte sind gut, sie sind aber nicht das Beste. Das Beste wird nicht deutlich durch Worte. Der Geist, aus dem wir handeln, ist das Höchste. Niemand weiss, was er thut, wenn er recht handelt; aber des Unrechten sind wir uns immer bewusst. Des echten Künstlers Lehre schliesst den Sinn auf; denn wo die Worte fehlen, spricht die That. Der erste Schüler lernt aus dem Bekannten das Unbekannte entwickeln und nähert sich dem Meister. — *Goethe*.

(*b*) Alle Morgen wird auf unseren Frühstückstisch mit der Zeitung eine Bundel der verschiedenartigsten Neuigkeiten gelegt: Weltlauf und Privatschicksale, Handel und Verkehr, Feuilleton und Theaterskandal, Börse und pikanter Roman. Unter dieser Fülle

von Dingen, wie Vieles davon ist brauchbar für unser Leben und unsere Bildung? Wie Vieles nährt das heilige Feuer der Humanität? Und wie Vieles schmeichelt unseren schlimmeren Neigungen und Trieben? Man sage nicht, dass hier nur das Angebot der Nachfrage entspreche; die Nachfrage hätte zurückgedrängt werden können, wäre das Angebot nicht so eifrig gewesen. Und wenn es dabei bliebe! Aber dabei hat es sein Bewenden nicht, der Leser erhält durch die Zeitung nicht bloss den Stoff, sondern den Stoff in einer bestimmten Form und Fassung, begleitet von einem entschiedenen, wenngleich anonymen Urteil. . . . Und mag sich ein eifriger Zeitungsleser noch so sehr und so lange sträuben, die Meinung des Blattes, das er hält, als die seinige aufzunehmen, es kommen erst Augenblicke, dann Tage und Wochen, in denen es ihm bequem ist, wenn das Journal für ihn denkt, und ist er so weit, dann wird ihm das Denken überhaupt zu mühsam, und er überlässt es ein für allemal seinem gedruckten Orakel. — *Schönbach.*

II. (*a*) Without translating, paraphrase the following passage in ordinary German prose:

Es ist der Krieg ein roh, gewaltsam Handwerk.
Man kommt nicht aus mit sanften Mitteln, alles
Lässt sich nicht schonen. Wollte man's erpassen,
Bis sie zu Wien aus vier und zwanzig Uebeln
Das kleinste ausgewählt, man passte lange!
— Frisch mitten durchgegriffen, das ist besser!
Reiss dann, was mag! — Die Menschen in der Regel
Verstehen sich aufs Flicken und aufs Stückeln,
Und finden sich in ein verhasstes Müssen
Weit besser als in eine bittre Wahl. — *Schiller.*

(*b*) Explain in German (1) the use of the uninflected forms *roh*, *gewaltsam;* (2) the difference between *passen* and *erpassen;* (3) the use of *durchgegriffen.*

(*c*) Give the first five lines as they would appear in a report introduced by *er sagte.*

(*d*) Explain in German the meaning of the last two lines.

III. Write fifteen or twenty lines in German upon the plot of some play or novel that you have read.

IV. Translate into German:

One of the most beautiful traits in the character of Frederick the Great was his strict love of justice. Who does not know the story of the windmill at Potsdam, which the king wished to buy of the owner because it stood in his way in the laying out[1] of the park of Sans-Souci? The miller refused steadfastly to sell his property, tho the king offered him a large sum and promised to have another mill built for him. But the obstinate old fellow only answered: "My grandfather built this mill, I inherited it from my father, and my children shall inherit it from me." The king now became impatient and said: "But you know, I suppose, that I might have your mill for nothing, if I wished." "Yes," answered the miller, "if there were no chamber of justice[2] at Berlin." Pleased at the confidence which the old miller had in the Prussian courts, the king dismissed the man without further words.

[1] Laying out, *die Anlage.*

[2] Chamber of justice, *das Kammergericht.*

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REPORT OF THE COMMITTEE OF SEVEN OF THE AMERICAN HISTORICAL ASSOCIATION

To the Committee on College-Entrance Requirements of the National Educational Association:

The committee making the following recommendations was appointed in 1896 by the American Historical Association to consider the subject of history in the secondary schools and to draw up a scheme of college-entrance requirements in history. Since that time we have been engaged in this work, endeavoring to gather information concerning existing conditions and tendencies of historical instruction, and to make suggestions on the general subject under consideration.[1] In the statement which follows we mark out a system of college-entrance requirements in history without seeking to give all the reasons which seem to us to support the conclusions presented.

[1] A statement of the grounds upon which these conclusions are based is made in the report of this committee to the American Historical Association. This report is published by Macmillan & Co., 1899, and also appears in the proceedings of the American Historical Association for 1898. Besides discussing the value of history and its place in the curriculum, the report considers the manner of treating different periods of history and methods of instruction. Articles on the teaching of history in foreign countries and select bibliographies for the use of teachers are also included.

IMPORTANT PLACE NOW HELD BY HISTORY

History as a secondary study demands serious attention. The report of the United States Commissioner of Education for 1896–97 shows that there were, at that time, 186,581 pupils in the secondary schools studying history (other than United States history). No statistics have been collected to show the number of students studying the history and government of the United States; but there is good ground for saying that, if such pupils were taken into account, the number of history pupils would be found to exceed two hundred thousand, and perhaps equal, if not exceed, in number those engaged in the study of any other subject save algebra. According to the statistics of the Bureau of Education, the number of pupils studying history (other than United States history) has increased 152 per cent. in the last ten years, a rate of increase below that of only one subject in the curriculum. These simple facts seem to make it plain that college-entrance requirements that are properly based upon the work and tendencies of the secondary schools should include a liberal amount of history among the prescribed and optional studies.

PRINCIPLES OF COLLEGE REQUIREMENTS

In all our consideration of college-entrance requirements in history we have endeavored to bear in mind certain facts and principles which we conceive to be fundamental, and it may be well to state at the outset what we conceive these facts to be, and upon what main principles we have drawn up the following recommendations. The great majority of secondary schools are primarily not preparatory schools where boys and girls are fitted for college. The curriculum must be prepared for the purpose of developing boys and girls into young men and women, not for the purpose of fitting them to meet college-entrance examinations, or of filling them with certain information which some faculty thinks desirable as a forerunner of college work. Many of the academies, and some of the high schools, can, without much trouble, meet the requirements of a college, however artificial, but the great majority of high schools, and some of the academies, have great difficulty in so doing, and it is an almost impossible task to arrange the program so that pupils can be fitted for more than one institution.[1]

We welcome the efforts of the committee of the National Educational Association to simplify and unify college-entrance requirements. But we believe that the first requisite for the successful accomplishment of this task is the recognition of the fact that the great majority of schools are not fitting schools for colleges, and it seems to us that any rigid and inelastic régime which does not take into consideration the fact that

[1] We find, for example, in the catalog of a good high school — a school rather large than small, and well equipped with teachers — this typical statement, that a pupil can prepare in that school for one of several universities, but he should know what he intends to do at the beginning of his second year, and that a failure to choose accurately in any one semester involves the loss of a year.

schools are working in many different environments and are subject to different limitations and conditions cannot be widely accepted or prove useful for any length of time. We venture to suggest, then, that in an effort to simplify the situation and to relieve the schools from their present burdens, two things are essential: (1) that the fundamental scope and purpose of the secondary schools be regarded; (2) that such elasticity be allowed that schools may fit for college and adapt themselves to local environments and local needs.[1]

We feel justified, therefore, as students and teachers, in marking out, in a general way, what we think is the best curriculum in history; and we desire to emphasize the thought that history is a peculiarly helpful study in a secondary course which is fashioned with the thought of preparing boys and girls for the duties of daily life and intelligent citizenship. But we do not feel that we should seek to lay down hard and fast college-entrance requirements and ask your committee to declare in favor of an altogether inflexible régime. It seems to us that the time has come when the colleges should recognize the value of history and admit to their lists of requirements a liberal amount of historical work.

CHOICE OF SUBJECTS

We have carefully considered how the general field of history can best be covered, and how much time should be devoted to the work. We cannot recommend a short course in general history in which an effort is made to cover the whole field of the world's progress in a single year's study. Such a general conspectus requires four years' work, if the results are to be thoroly satisfactory; it need hardly be said that three years are better than two, and two years are better than one. But we recommend, if less than four years is given to historical work, that some portion of the world's history be omitted, in order that the portions selected may be studied in a manner likely to produce good pedagogical results. Training in historical thinking and the discipline coming from a careful examination of a limited period — a period large enough, however, to constitute a significant part of the world's development — seem to us more important than obtaining a bird's-eye view of the whole field.

We recommend that the four-years' course include the following blocks or periods of history. Each of these periods has a certain unity and meaning, and they can best be pursued in the order in which they are here set down, which follows the natural chronological sequence.

I. Ancient history, with special reference to Greek and Roman history, and including also a short introductory study of the more ancient

[1] It does not seem wise, even if it were possible, to outline the same entrance requirements for the University of California, the University of Kansas, the University of North Carolina, Yale, Harvard, Tulane, and a hundred others. If the curriculum is rigid and inflexible, this means that secondary schools everywhere should conform to the same mold, disregard environment, and come under the domination of external force.

nations and the chief events of the early Middle Ages. The period may close with the establishment of the Holy Roman Empire (800), the death of Charlemagne (814), or the Treaty of Verdun (843).

II. Mediæval and modern European history, from the close of the first period to the present time.

III. English history.

IV. American history and civil government.

Each of these periods deserves careful study, and we do not think, as we have already said, that less than four years is sufficient to cover them all in a satisfactory manner. If only three years can be given to historical work, three of these periods can be chosen and one omitted. Such omission seems to us to be wiser than any condensation of the whole. But if it seems best to compress two of the periods into a single year, one of the following plans may be wisely adopted: (*a*) combine English and American history in such a manner that the important principles wrought out in English history and the main facts of English expansion will be taught in connection with American colonial and American political history; (*b*) treat English history in such a way as to include the most important elements of mediæval and modern European history.

RECOMMENDATIONS FOR COLLEGE REQUIREMENTS

For convenience of statement we have adopted in the following recommendations the term "unit," and by one unit we mean either one year of historical work wherein the study is given five times per week, or two years of historical work wherein the study is given three times per week. We have thought it best to take into consideration the fact that different colleges have now not only different requirements, but also entirely different methods of framing and proposing requirements. It has not seemed wise to outline historical courses on the supposition that all colleges would at once conform to a uniform arrangement.

1. If a college or scientific school has a system of complete options in college-entrance requirements, that is, if it accepts a given number of years' work or units, without prescribing specific subjects of study (as, for example, at Leland Stanford University), we recommend that four units in history be accepted as an equivalent for a like amount of work in other subjects. Likewise, that one, two, or three units in history be accepted.

2. If a college or scientific school requires a list of certain prescribed studies, and also demands additional subjects chosen out of an optional list (as, for example, at Harvard University), we recommend that one unit of history be placed on the list of definitely prescribed studies, and that one, two, or three other units of history be placed among the optional studies.

3. If a college or scientific school has rigid requirements without

options (as, for example, at Yale College and the Sheffield Scientific School), we recommend that at least one unit of history be required for entrance.

These recommendations (1, 2, and 3) do not seem to us unreasonable, and we do not believe that their adoption would impose any burden upon colleges or preparatory schools. If the traditional requirements in other subjects need to be diminished in order to allow one unit of history in any régime of rigid requirements, we do not think that such diminution is unwise, because history is now very generally studied, and because the training obtained from historical work is an essential of good secondary education. It will be seen from the statement that follows (under 4) that we do not recommend any particular field or period of history to which a year's study should be given. To constitute this unit any one of the periods or blocks of history previously mentioned can be selected.

4. Where a college has several distinct courses leading to different degrees, and marks out different groups of preparatory study, each group preparing for one of the college courses (as, for example, at the University of Michigan), the use to be made of history requires more detailed exposition. In one of these preparatory courses the ancient languages are given chief attention; in a second, a modern language is substituted for one of the ancient languages; in a third, the chief energy is devoted to natural sciences; in a fourth, main stress is laid upon history and English language and literature. The general recommendations above given will aid somewhat in outlining preparatory courses in history, where such definite routes for admission to colleges are marked out:

A. We believe that in each preparatory course there should be at least one unit of history. This recommendation means that classical students should have at least one full year of historical work. A course which purports to deal with the "humanities" cannot afford to be without one year's work in a study whose sole theme is humanity. When four years are given to Latin, two or more to Greek, two or three to mathematics, one, or perchance two, to sciences, some room should be found for history, even if the time given to other studies must be diminished. If we take for granted that the great majority of secondary pupils do not go to college, can we declare that they should go out into life with no knowledge of the humanities save that acquired by the study of the Greek and Roman tongues?

To decide what field of history should be chosen is a matter of considerable difficulty. We believe it desirable that pupils should know the life and thought of Greece and Rome, and the development of their civilization; that they should study the great facts of European history after the downfall of the Roman empire; that they should have some knowledge of how England grew to be a great empire, and how English liberty developed; that they should come to know their own political

surroundings by studying American history and government. We hesitate, therefore, to recommend that any one particular field be chosen to the exclusion of the rest, and yet we think that far better educational results can be secured by devoting a year to one period than by attempting to cover the history of the world in that length of time. We believe that it is more important that pupils should acquire knowledge of what history is and how it should be studied, than that they should cover any particular field.

Perhaps it is not impossible in connection with the study of Greek and Latin to pay attention to the growth of Greece and Rome, so that pupils may be led to an appreciation of the character and essential nature of ancient civilization. This is one of the great ends of historical work; and if the humanities can thus be humanized, there will be less need of prescribing Greek and Roman history as a distinct subject for classical students,[1] and some other historical field may then be chosen. We cannot be sure, however, that such methods of teaching the classics will prevail, and we must content ourselves with recommending one of the four blocks, or periods, which are marked out in the earlier portions of this paper, without designating any particular one.

B. The secondary course, sometimes called the Latin course, in which a modern language takes the place of Greek, presents nearly the same problems as the classical course. It does not afford much time for the study of history, and we recommend that some one of the blocks mentioned above be selected.

C. In the scientific secondary course more opportunity for historical study is often allowed, and here, perhaps, two units of history can be given. One of them, at least, will naturally be a modern field; and yet it may be said that it is highly desirable that scientific pupils should by the study of ancient history obtain something of the culture which is not wrongly supposed to come from the study of classical civilizations.

D. The fourth secondary course, commonly called the English course, should have history for its backbone, inasmuch as it is a study peculiarly capable of being continued thruout the four years, and offering that opportunity for continuous development which the classical pupil attains from the prolonged study of Latin. We strongly advise that sustained effort be devoted to history, in order that this course may have a certain consistency and unity. There are already schools which offer history for four years, and give four full units, consisting substantially of the four blocks we have outlined. If the four full units cannot be given, it may be well to offer history only three times a week in one of the four years. If only three years can be devoted to the study, one of the four blocks must, as we have already said, be omitted, or two fields

[1] That the desirability of such method is recognized by many classical teachers is shown, for example, by the paper by Professor Clifford H. Moore on "How to Enrich the Classical Course," published in the *School Review*, September, 1898.

must be compressed in some such manner as that suggested in the earlier portion of this paper.

The general recommendations under this head may be summed up as follows: (*a*) for the classical course, one unit of history, to consist of one of the four blocks previously mentioned; (*b*) for the Latin course, the same; (*c*) for the scientific course, two units, consisting of any two of the blocks; (*d*) for the English course, three units, consisting of any three of the blocks, or of two blocks and a combination of two others. We strongly recommend that four years be given in this course.

MORE THAN ONE UNIT DESIRABLE

It should be said in conclusion that, in demanding but one unit of history as the minimum requirement for entrance to a college or scientific school, the committee does not wish to be understood as expressing its approval of this amount as an adequate course in history for secondary schools. In this portion of the report we have been obliged to work within the limits of the systems of entrance requirements which now prevail, and to frame recommendations which may be adapted to existing conditions; but we do not believe that a single unit of history constitutes a sufficient course — viewed with reference either to the relative importance of the subject or to the possibility of realizing the aims of historical instruction within the time that would thus be at the teacher's disposal. While it may not at present be feasible for every college to require more than one unit of history, the committee believes that two units should constitute the minimum amount offered in any school, and it maintains that a still more extended course in history has claims quite equal to those that may be urged on behalf of any other study in the secondary curriculum.

ENTRANCE EXAMINATIONS

One subject connected with college-entrance requirements has peculiar importance in connection with the study of history, namely, entrance examinations. Higher institutions which admit students on the basis of certificates need have no administrative difficulty in giving large recognition to history as a preparatory subject, but in colleges and universities which can be entered only after passing examinations the problem is somewhat different. The utility of historical study lies not only in the acquisition of certain important facts, but in great measure in its indirect results in training the power of discrimination and judgment; and it will often happen that pupils who have profited largely from their study of history will, especially after two or three years have elapsed, show surprising *lacunæ* in their stores of historical information. While a course in history should be progressive and built steadily upon what has gone before, one stage does not depend so immediately upon the preceding

and involve so persistent a review of earlier work as in the case of languages and mathematics, and growth in power of historical thinking is much more difficult to measure than progress in mathematical knowledge or linguistic facility. These difficulties are present, in some degree, even when the candidate is examined on work done in history in the last year of the secondary school, but they become exceedingly serious when the subject has been studied some years before, or when the course in history covers two, three, or four years of the period of secondary instruction.

The remedy, in our opinion, lies, not in the exclusion or unnatural restriction of history as a subject for entrance, but in the reform of methods of examination in history; if the present system of entrance examinations does not — and it generally does not — properly test the qualifications of candidates in history, it is time to consider how it may be changed. Certainly nothing has done more to discredit history as a subject for college entrance than the setting of papers which demand no more preparation than a few weeks' cram. The suggestions which follow are offered in the hope, not that they will afford a final solution of the problem, but that they may prove helpful in bringing about a more just and adequate system of examinations in history. Their complete adoption will naturally involve a larger allotment of time to history than is now given in examination schedules, and impose a heavier burden upon those to whose lot the reading of papers in history falls, but it is not likely that the demands of time and energy will prove greater than in other well-recognized admission subjects, and it is not unreasonable to expect college authorities to make suitable provision in these regards.

The main element in entrance examinations in history must probably continue to be the written paper, but it should be set with the idea of testing, to some extent, the candidate's ability to use historical material, as well as his knowledge of important facts. The information questions should not demand the simple reproduction of the statements of the text, but should be framed, in large measure, so as to require the grouping of facts in a different form from that followed in the books recommended for preparation. There should also be questions involving some power of discrimination and some use of legitimate comparison on the part of the candidate. It is not expected that skill in utilizing historical material will be present in a high degree in the candidate for admission to college, but the student who has learned how to handle books and extract information from them in the course of his secondary studies has the right and the ability to make this count for something toward college entrance. As suitable tests may be suggested: comment on carefully chosen brief extracts from simple sources or modern works; analysis or discussion of more extended passages, supplemented, perhaps, by outline maps or concrete illustrations — anything, in short, which will show the student's

capacity for taking up a fresh question in a way that indicates some development of the historical sense. Naturally, attainments in this direction will be expected chiefly of those who present history as an additional option.

To many these tests will appear sufficient, but it must always be borne in mind that a written paper, even when the questions have been prepared with great care, cannot yield such decisive results in history as it can, for example, in a subject like English composition. The examiner should always have an opportunity, particularly in doubtful cases, of supplementing by other means the information gained from the paper. One excellent adjunct is the submission by the candidate of written work done in connection with his study of history in school. This may include notebooks, abstracts of reading, and prepared papers — none of which, however, should be accepted without proper guarantee of authenticity and independent preparation. Another supplementary test, which is largely used in European examinations, and has commended itself to the experience of many American examiners, consists of a brief oral conference with the candidate. This should be quite informal in character, and should aim to discover, if possible, something concerning the personality of the candidate and the nature of his historical training, rather than to elicit brief answers to a few arbitrarily chosen questions.

COURSES

FOUR-YEARS' COURSE IN HISTORY

First year — Ancient history to 800 A. D.
Second year — Mediæval and modern European history.
Third year — English history.
Fourth year — American history and civil government.

THREE-YEARS' COURSE IN HISTORY

A

Any three of the above blocks. This plan seems to the committee better than any one of the following :

B

First or second year — Ancient history.
Second or third year — English history, with special reference to the chief events in the history of continental Europe.
Third or fourth year — American history or civil government.

C

First or second year — Ancient history.
Second or third year — Mediæval and modern European history.
Third or fourth year — American history, with a consideration of the chief events in the history of England.

D

First year — Ancient history.
Second year — English history, with reference to events in later mediæval history (three times per week).

Third year — English history, with reference to the chief events in modern European history (three times per week).

Fourth year — American history and civil government.

E

First year — Ancient history.

Second year — Mediæval and modern European history.

Third year — American history, with special reference to development of English political principles and English expansion in connection with American colonial history (three times per week).

Fourth year — American history and civil government (three times per week).

ANDREW C. MCLAUGHLIN, *Chairman*,
Professor of American History in the University of Michigan.

HERBERT B. ADAMS,
Professor of American and Institutional History in the Johns Hopkins University.

GEORGE L. FOX,
Principal of the Hopkins Grammar School, New Haven, Conn.

ALBERT BUSHNELL HART,
Professor of History in Harvard University.

CHARLES H. HASKINS,
Professsor of European History in the University of Wisconsin.

LUCY M. SALMON,
Professor of History in Vassar College.

H. MORSE STEPHENS,
Professor of Modern European History in Cornell University.

REPORT OF THE COMMITTEE OF THE CHICAGO SECTION OF THE AMERICAN MATHEMATICAL SOCIETY

Dr. A. F. Nightingale, Chairman.

SIR: In compliance with a request from you, the Chicago Section of the American Mathematical Society, at its session in December, 1898, appointed a committee to co-operate with the committee of the National Educational Association of which you are chairman, by preparing for the use of the latter committee a report "on the scope, aim, and place of these studies (mathematics) in the secondary schools and in preparation for college, with model courses in algebra, geometry (plane and solid), and trigonometry, with methods to be used, time to be consumed, etc., etc." This action was afterward approved by the Council of the society.

In order that the various phases of instruction in mathematics might be more fully

represented, it was decided to associate with the members of the American Mathematical Society upon the committee several persons not members of the society, these persons to have equal voice and vote with the members of the society in the proceedings of the committee, but to be designated as associate members of the committee. The associate members are Messrs. Lyon and Schobinger.

The committee held several sessions in December, at which the various problems presenting themselves were discussed, and a subcommittee was appointed to prepare a draft of a report. This was done, and a copy sent to each member of the committee. These drafts were returned with criticisms and amendments, upon the basis of which a second draft was prepared by the subcommittee and a copy sent to each member of the committee. The comments hereupon were discussed by those members of the committee present at the meeting of the Chicago Section of the American Mathematical Society at Evanston, April 1, 1899, and the subcommittee was directed to prepare a third and final draft, which is submitted herewith. Since the report is submitted to you directly, and not to the society, the individuals concurring in the report are alone responsible for its contents.

Very respectfully,

J. W. A. YOUNG,

Chairman.

PRELIMINARY REMARKS

1. *Terms used.*—The term "secondary school" is used to designate, generically, all schools which have courses fitting for college. The term includes high schools, academies, and private college-preparatory schools. The course of study in the secondary school proper is assumed to cover four years.

The term "the grades" is used to designate the work prior to the secondary school. It is assumed to cover eight years. The work of each of these years is sometimes alluded to as a "grade," the grades being numbered in order from one to eight. The child is assumed to enter the first grade at the age of six years.

2. *Scope of report.*—In determining the phases of topics to be discussed and the nature of its detailed suggestions, the committee has been governed by the condition of instruction today, rather than the absolute importance in themselves of the topics selected for remark. It was found impracticable to discuss the work in mathematics in the secondary school without giving quite a little consideration to the closely related antecedent work in the grades.

3. *Scope of mathematical work.*—At its sessions in December the following resolutions were adopted by the committee:

(*a*) That before the pupils reach the secondary school the work in mathematics should be the same for all.

(*b*) That in the secondary school the standard course in mathematics should be sufficient to admit to college; that this course should be required of all pupils, and that the instruction in this course should be the same for all pupils.

(*c*) That the main emphasis should be given to such topics as are useful in later work.

(*d*) That the best place for a topic in the course of study is where it is most closely related to other topics; that there should be applications of algebra, geometry, and arithmetic to each other, and to various sciences and the practical affairs of life.

CONCERNING METHODS

Various methods of teaching mathematics are in vogue. The good teacher will not tie himself to any one method, but, on occasion, will make use of the good features of every one. The committee recommends no single method above all others, but whatever method may be used, the aim should always be to cultivate independent thinking on the part of the pupil. A method which encourages, or even permits, rote work, or mechanical manipulations, is radically wrong. The value of the study of mathematics cannot be realized, not one of its objects attained, unless the student himself thinks, produces. *Not to learn proofs, but to prove*, must be his task. This idea should dominate the instruction from the very beginning. The independent work should not be left to the close; not to the closing years, nor to the close of the subject in hand, nor to the close of the chapter, nor even to the close of the first lesson in arithmetic.

GENERAL METHODIC SUGGESTIONS

1. *Steps.*—The importance of distinguishing the various steps of a process, and of taking them *one at a time*, can hardly be overemphasized. This is sometimes irksome to the pupil, and the consequent attempts to take several steps at once are responsible for much of some pupils' lack of success in mathematics.

2. *Oral work.*—In all the subjects of mathematics much stress should be laid on oral solution of *many easy* and carefully graded exercises. Principles are just as effectually applied in these as in more complicated exercises, and the application is more readily seen.

3. *Testing results.*—The pupil should be taught to test the accuracy of his results by applying a check whenever this is possible, and before completing any topic he should have acquired sufficient facility in checking his work against errors, to rely with confidence upon the correctness of his own results, independently of corroboration by the teacher or a printed answer. Often a rough estimate of the probable character of the result will enable the pupil to detect a glaring error, without the use of a more detailed check. Written exercises should by no means all have results of a simple form, since pupils are very apt to fall into the habit of thinking that the result *must* be simple to be correct.

4. *Translation.*—Mathematics has a language of its own. The teacher must be unwearying in his endeavors to teach his pupils to speak the sentences of the mathematical language with intelligence, and he must be

ever on the alert to check the tendency to use them as meaningless jargon. Here, as in other languages, one who has made some progress shows that he has intelligent control of the language by uttering consistent sentences conveying ideas. Ability to think *in* the language is one of the ends aimed at, but in the language of mathematics this can be attained only by much translating; the beginner must assure himself that he understands the mathematical sentence, by giving its equivalent in ordinary English; and, what is more difficult, must be able to clothe in mathematical symbols thoughts expressed in English.

5. *Different presentations.*—In the fundamentals and in the beginning of any subject the committee is decidedly of opinion that one set of definitions and style of presentation should be strictly adhered to. After a time (and still adhering to the one style of treatment adopted) the presentation by the pupils of other proofs which they may have found for the same proposition, or of different methods of attaining the result of some exercise, and the discussion of these in class, is of great value. More may often be gained by proving one proposition in three different ways than by proving three propositions in the same way. This practice should, however, be introduced gradually, great care being taken to avoid confusion; and its use should be much increased as the pupils gain a firm grasp of the subject.

Definitions, tho developed in class as needed, should not be left in an inaccurate form, nor inconsistent with the analogous definitions of later mathematics. Tho in higher mathematics the definitions of the elementary subjects may be generalized, it should not be necessary to overturn them. (E. g., the circle should be defined as a curve, not as a portion of a plane.)

6. *Neatness and accuracy.*—Papers written in a slovenly manner, slipshod work, half-guessing at results, and artificial juggling with the quantities involved, are far too frequently found. The difficulty can be met only by persistent training, from the very beginning of mathematical instruction, in neatness and accuracy. In particular, the committee suggests the use of numerous short written exercises, in which the pupil is not hurried for time by the amount assigned, and in which the requirement is made that what he hands in must be accurate and neatly arranged.

7. *Synopses.*—At the close of each chapter or topic a synopsis in schematic form of its definitions, methods, and results should be made. The object of this is to correlate the material and to secure that view of the topic as a whole which is too likely to be obscured by the details of the first study and the working of exercises. This will serve also to bring clearly before the pupils that the solution of exercises is not an end in itself, but is a means of impressing a connected theory.

8. *Correlation of work.*—The subjects arithmetic, geometry, algebra

should be treated as branches of one whole — mathematics — and each of these subjects freely applied in illustrating and broadening the others.

9. *Independent thinking.*—Whatever specific method or methods may be used in conducting the instruction, the controlling principle must be that the pupil is to be kept thinking for himself. The learning of proofs, even tho it be done understandingly, is not sufficient. *Not learning proofs, but proving*, should be the pupil's principal activity in the study of mathematics.

ARITHMETIC

The instruction in arithmetic, except as it would properly come up in connection with geometry, algebra, and trigonometry, thus adding to their interest and usefulness, should be confined to the following topics:

1. The four fundamental processes with integers, all the computations being tested.

2. Factorization of all numbers up to 100, and some above 100, exponents being used. The results not to be derived by rule, but from the multiplication table.

3. Easy work by short rule in L. C. M. and H. C. D.; to be tested by seeing whether the quotients obtained by dividing L. C. M. by the numbers are relatively prime, and whether the numbers divided by the H. C. D. also give relatively prime results.

4. Simple work in denominate numbers, only the measures generally in vogue being used.

5. Simple operations in fractions, geometric, i. e., graphic illustrations being given, and fractions with large terms being, as a rule, avoided. Application of simple fractions to making rough estimates.

Much stress on cancellation; actual multiplication or division being performed by cancellation wherever possible.

6. United States money. The commoner measures of the metric system; the measures being actually constructed, and measurements performed with them. There should also be rough comparison with our own measures.

7. Decimals: the four rules, with especial attention to the correct placing of the decimal point.

8. Simple problems in percentage; the fact being emphasized that "per cent." means hundredths, or a fraction with 100 for denominator. The pupil should be trained always first to ask himself of what the per cent. is to be taken. This (the determination of the base) is largely a matter of use of language. Making use of "aliquot parts" (where the per cent. can easily be converted into such) connects per cent. with fractions and helps to prevent rote methods.

9. Examples in simple interest where the time and rate are given.

10. The use of the "method of analysis" for the solution of problems

in simple and compound proportion, and in interest, without ever introducing the terminology and machinery usual in proportion.[1]

11. The concrete exemplification of the simpler geometric notions and facts should begin with the beginning of the arithmetic and be carried on in connection with this subject and with drawing during the first six years. By the close of this time the leading facts and theorems of geometry, plane and solid, should have become familiar by means of concrete illustrations and computations (mensuration). The pupil will now, perhaps, himself begin to feel the need of *proof* rather than illustrations (or will be led to feel it by the teacher), and at the beginning of the seventh year this transition may be made, and the developing of proofs begun carefully, gradually, and as informally as possible. In the seventh year the work in arithmetic may permit the informal beginning (as abbreviations) of literal arithmetic. The committee recommends that all topics not mentioned be omitted from the instruction in arithmetic as such — in some cases to be taken up later (in algebra, geometry, or trigonometry), in others to be omitted altogether.

In all the instruction in arithmetic there should be insistence upon neatness and upon accuracy; much oral work (object: correct thinking) and frequent short oral drills (object: quickness and accuracy); the testing of computations, both by rough estimates and exact tests; avoidance of technical terms and formal rules, save where absolutely necessary and when the need is felt by the pupil; ideas before definitions or rules.

ALGEBRA

While not recommending any radical alterations in the subject-matter of algebra, as usually presented in our best schools,[2] the committee desires to emphasize the following points:

[1] As sufficient exemplification of the method we give the following: If 48 men can do a piece of work in 12 days, working 10 hours a day, in how many days of 8 hours each would 40 men accomplish the same work?

Arrangement:	Men	Days	Hours
	48	12	10
	40	?	8

Oral explanation: We seek days, so we begin with days. If 48 men accomplish the work in 12 days, 1 man would have to work 48 times as many days as 48 men, and 40 men $\frac{1}{40}$ as many as 1 man. That is, working 10 hours per day. To accomplish it by working 1 hour per day, it would take ten times as many days as when working 10 hours per day, and to do it by working 8 hours per day, $\frac{1}{8}$ as many days as when working 1 hour per day. We have now considered all the data, and, performing the multiplication, we obtain the result.

The written work is by cancellation. Nothing is written down except the arrangement and the following equation:

$$12 \cdot 48 \cdot \tfrac{1}{40} \cdot 10 \cdot \tfrac{1}{8} = 18.$$

This method makes compound proportion correspondingly easy, and dispenses entirely with the confusing verbiage of the subject. The work is precisely the same, no matter which of the quantities is unknown.

[2] The report of 1896–97 of the Commissioner of Education contains (pp. 457–613) a collocation of the entrance requirements of 432 institutions having a course leading to the degree of A.B. Of these institutions, 346 specify arithmetic as an entrance requirement, the others probably regard it as implied in the requirement of algebra. Algebra is required in 412 institutions to the following amounts:

1. *The arithmetical side of algebra.*—Computations with numbers should be constantly introduced, problems with literal quantities being worked out or verified with numerical data also. The processes of arithmetic, both oral and written, should not be allowed to fall into disuse, but facility therein should rather be increased. At the same time, the pupil should understand the value of algebra in abridging or simplifying computation with numbers, or in proving the correctness of rules of computation, and should understand clearly that the devices of mathematics (especially algebra) have the purpose of enabling us *not* to compute; and that actual computations are usually not to be made so long as they can be avoided; that cancellation is to be resorted to wherever possible; and that to obtain an expression in factored form, or in any form in which operations are *indicated*, is a distinct advantage, not to be surrendered by needlessly performing the operations. Some of the topics omitted from arithmetic should be taken up at appropriate places in the work of algebra.

2. *The equational side of algebra.*—The equation should be made from the very beginning. Very simple problems in words leading to equations can be given at the outset.

3. *Algebraic translation.*—What has been said as to the value and necessity of translation in general applies with special force to algebra. Here the danger of mechanical, or even haphazard, manipulation of symbols is perhaps the greatest, and it must be especially guarded against by care that the meaning of the symbols, and the reason for the operations, be always clear in the pupil's mind. This can be done to a large extent by requiring the pupil to give readily and clearly in words the meaning of the formulæ and equations. On the other hand, the danger is exaggerated by the use of complicated and long examples, which seem to emphasize operative skill merely, and make that appear as the main object sought. Better many short examples with the principles always

To quadratics	37	institutions
Including quadratics	74	"
Amount not specified	201	"
	312	"

The other requirements are as follows:

Plane geometry in	294	institutions
Solid geometry in	93	"
Trigonometry in	4	"
Conic sections in	2	"

Upon looking over the detailed statement of the requirements for each institution, it appears that the better institutions require arithmetic (explicitly or tacitly), algebra including quadratics, and plane geometry.

Solid geometry is required by many institutions of high rank, and not required by others of equally high rank. The territorial distribution of the institutions requiring solid geometry is interesting.

Division	Total number of institutions	Number requiring solid geometry	
North Atlantic	76	5	6.6 per cent.
South Atlantic	61	4	6.6 "
North Central	183	68	37.1 "
South Central	75	8	10.7 "
Western	37	8	21.6 "
Total	432	93	21.5 per cent.

clearly apprehended than a few complicated ones with the principle obscured.

(Skill in manipulating long and intricate algebraic expressions should also be attained, and for this purpose the use of long and hard examples, after the principles and methods of a topic are clearly understood, is indispensable.)

4. *Topics to be emphasized.*— The following topics require especially careful treatment:

The meaning and use of exponents, positive, negative, and fractional; the handling of the simpler surds; the distinction between identical equations and equations of condition; the character of the roots of the quadratic equation as determined by inspection; the connection between the roots and the coefficients of the quadratic; the solution of equations by factoring; and the making of the algebraic statements for problems given in words.

5. *Secondary-school algebra and college algebra.*— It should be the aim of the secondary school to avoid taking up any of the topics which are customarily treated in college algebra, but rather to secure as thoro a mastery as possible of those topics which the college presupposes. It is recommended that schools which have hitherto taken up topics anticipatory of college algebra devote the time gained by omitting them to a more thoro study of the topics of the previous head.

The progressions, arithmetical and geometric (with applications to interest, simple and compound), and the theory and use of logarithms, might well, so far as the nature and difficulties of the subject are concerned, be included in the secondary-school course, but as they are required for entrance by very few colleges, and are accordingly taken up in connection with college algebra, the committee recommends that they be omitted from the secondary-school course, in the interests of economy of energy, and to avoid duplication of work; until such time at least as, by action on the part of the colleges, these topics (or any of them) are relinquished as parts of college algebra, and made parts of the entrance requirements.

These remarks relate solely to the work in algebra *required of all pupils* in the secondary school. It is not meant to discourage the offering of more advanced courses in algebra ("college algebra") or in trigonometry to such pupils as may wish to take them. As these pupils will often desire that these advanced courses in the secondary school should be accepted by some college as the equivalent of college work, the scope and character of the work will usually be determined by the requirements of the college in question.

DEMONSTRATIVE GEOMETRY

The instruction in demonstrative geometry should not begin with a mass of definitions and axioms. All definitions should be introduced

when needed, and not earlier; and, as a rule, only after the teacher has, by suitable examples and problems, familiarized the pupil to some extent with the notion in question, and the pupil himself feels the need of some convenient term by which to designate it, or the need of a precise agreement as to the meaning to be given to a term already used vaguely in common parlance.

Care should be taken to select for the early instruction such propositions as are less difficult to understand because less nearly self-evident; those that are more nearly self-evident being reserved for a later stage. Such propositions as, "All straight angles are equal," "All right angles are equal," should be omitted altogether.

Oral proofs (i. e., proofs in which nothing but the figure is placed upon the board) may well be used in geometry. Later even the figure may often be omitted. After the pupil has had some practice of this sort with familiar proofs, he will be able to work out the proofs of simple new propositions, with the figures only before him, and even if no figure, carrying the whole proof in the mind.

Frequent drills in seeing relations in a given figure (angles equal, supplementary; lines parallel, perpendicular; triangles equal, similar; etc., etc.) as a general exercise, without having any specific theorem proposed for proof, are also helpful. The teacher should prepare the figure, at first simple and anticipating coming propositions; later more complicated and unlike any of the figures of the text.

As to subject-matter, the propositions taken up may be divided into two classes: *fundamental* propositions and *exercises*. The fundamental propositions together constitute the nucleus or skeleton of the subject, being that minimum which all pupils alike should know. They should be reduced to as small a compass as possible. All other propositions constitute the class we have called *exercises*. The proofs of the exercises are to be based upon the fundamental propositions. Every course in geometry should invariably include all the fundamental propositions and a large number of exercises; the selection of the latter may vary from year to year. It is not at all implied here that the proofs of the fundamental propositions may not also be obtained as original exercises.

What has been said applies to both plane and solid geometry. A word may be added as to the use of models in solid geometry. While not wishing to undervalue models which are presented to the pupils ready-made, the committee believes that, as a rule, the pupils gain more by constructing their own models, and that this can be done very easily in a sufficient number of theorems. Some pieces of cardboard, darning needles, and thread constitute apparatus sufficient for making models of a large class of propositions. Another large class of models can be cut out of potatoes. A broomstick furnishes all the models needed for the

cylinder. An orange will do fairly well for the sphere, but a small slated globe in the hand of each pupil is better.

The attempt has been successfully made to teach geometry by interweaving solid and plane geometry from the outset. While the committee is not prepared to commend this, there are advantages to be gained by beginning solid geometry before plane geometry is completed. In the opinion of the committee, the restriction of the study of geometry in many secondary schools to plane geometry is unfortunate, and it is desirable that the school course and the college-entrance requirement in geometry should cover both plane and solid geometry.

The notions and results of modern geometry may be used with advantage, but only so far as they actually simplify or make clearer the topic in hand.

The work in demonstrative geometry should be accompanied by construction and measurement. E. g., in connection with similar triangles, pupils may measure distance of some inaccessible object, simply measuring base line and two angles, and then drawing to scale. Of course, the work is crude, but this form of exercise opens a new window in the child's mind.

In the work in geometry, arithmetic, and also algebra (so far as this subject has been developed), should be frequently applied.

TRIGONOMETRY

Trigonometry is at present usually not required in the school curriculum; to prepare pupils for admission to certain technical schools and colleges, it is sometimes taught in the schools. When thus taught, the subject-matter taken up is determined by the requirements of the institutions in preparation for which it is taught.

There is, however, no intrinsic reason why the elements of plane trigonometry should not be an integral part of the school course in mathematics; it can be developed well in continuation of algebra and plane geometry, and is a fitting sequel to them. The matter should be restricted to that needed for the solution of plane triangles — numerous, but simple applications to the determination of heights and distances should be made.

To avoid duplication of work, the introduction of plane trigonometry into the school course (like that of certain portions of algebra mentioned above) should be an action of school and college jointly.

The trigonometric functions should be defined as ratios, and the whole treatment should be based upon the ratio definitions exclusively.

Before logarithmic tables are introduced, sufficient training should have been given in the solution of problems by means of the natural functions to make the pupils regard these as the real functions; log sin., log cos., etc., appearing merely as tools.

The object of a logarithmic table is to abridge computations. Those tables are accordingly to be preferred which furnish such aids to interpolation that the value sought may be read off quickly with the desired degree of accuracy and without side computations.

DISTRIBUTION

I. IN THE GRADES

The committee believes that the work in arithmetic outlined by it can be completed in the seventh grade, and that in this grade half the time can be given to demonstrative geometry. In all the preceding grades concrete geometry should be interwoven with arithmetic and with drawing. The transition to demonstrative geometry will thus not be abrupt, but will find the pupil prepared for it. The introduction of demonstrations into the concrete work should be gradual and informal; there should be much demonstration before the machinery and technical terminology of demonstrations are introduced. In the eighth grade demonstrative geometry would continue to occupy half the time, and the other half would be devoted to the beginning of algebra. This should be a natural growth of the arithmetic; the use of letters to stand for numbers may be introduced even earlier in formulating rules; as, "The area of a rectangle is equal to the length times the breadth," $A = LB$. The equation with one unknown quantity may also be introduced informally as occasion may arise. Under favorable circumstances the following ground could perhaps be covered in the grammar grades:

Geometry. — Lines, angles, triangles, parallelograms, elements of the circle.

Algebra. — The four fundamental operations with positive and negative numbers; simple cases of factoring under multiplication; simple equations with one unknown, and problems leading to such equations.

In the work in these subjects and in their further development in the secondary school, numerical applications of the results should be made continually. These applications should lead to computations sufficiently difficult to keep in practice the facility in computation gained in arithmetic, and to increase it. Stress should be laid on the simplifications in computations which may often be made by the literal notation of algebra.

In suggesting this course of study for the grammar grade, the committee realizes that in many places it would be impracticable to adopt the suggestions at once as a whole. In fact, under some circumstances the committee would not encourage, but would actually discourage, the immediate and complete adoption of its suggestions. On the other hand, in cases where some (perhaps a large part) of the suggestions of the committee are already in force, and where the corps of teachers is prepared to adapt its work to the new plan, there would be no obstacle, but indeed

a distinct gain, in putting the committee's suggestions as a whole into immediate operation. The committee believes that the suggestions made (followed, if need be, gradually) are generally feasible.

The study of demonstrative geometry should in all cases be begun before that of algebra. Geometry is less abstract, less artificial, lends itself less readily to mere mechanical manipulations, and is more easily illustrated by concrete and familiar examples than algebra.

II. IN THE SECONDARY SCHOOL

The great desideratum for the distribution of mathematics in the secondary school is that it should be studied thruout each of the four years of the course. It is not meant by this that more time should be given to mathematics, but that this time should be distributed over the entire secondary-school course. The committee recommends no specific distribution over the four years of the hours now given to mathematics, but simply the general rule that there be work in mathematics required of all thruout the course, and that in no year less than two hours weekly be given to mathematics during the whole year.

If in any school it is altogether impracticable to take up mathematics in each of the four years, the state of affairs is to be deplored. If a year *must* be left free from mathematics, the committee recommends that it be the second or the first year.

The distribution of the subject-matter over the various years will be influenced by the distribution of the hours. The same general principles would, however, govern in all cases; of these are:

1. The study of geometry should be begun before that of algebra. Reasons for this have already been indicated.

2. When algebra has been begun, the two subjects should be carried on simultaneously in each year of the remainder of the four years. By simultaneously is meant simply in the same year. It is not necessary that the hours of instruction be given to each alternately. The division may even be the first half-year to one (geometry) and the second half-year to the other (algebra), but this arrangement is not to be preferred.

3. The work of the fourth year should include a review of all of the previous work of the course, with the aim to extend, broaden, deepen, and correlate what has already been done.

4. The instruction in mathematics of each class or section of a class should be, as far as practicable, in the hands of the same instructor for at least two years. It is still more important that, instead of trying to plan the assignment of work so that certain teachers do "first-year work," others "second-year work," etc., year after year, the aim should be to plan the assignment so that each teacher habitually teaches all the mathematical subjects, tho not necessarily all in one year.

5. Under no circumstances should an instructor who has not qualified

himself especially to teach mathematics be intrusted with a class in mathematics simply because he may have a vacant hour which must be filled up.

Thruout the course (and especially in the last year) the more the subjects can be interwoven, and made to illustrate and support each other, the better. The teacher should not hesitate to introduce a geometric illustration or a geometric truth into algebra, nor to avail himself in algebra of apt occasions for recalling previous geometric theorems, or developing and discussing new ones. Quite similarly, algebraic proofs and methods should be freely used in geometry, and, as need arises, new algebraic results established. It is quite wrong to teach geometry and algebra (and arithmetic) in the high school as subjects so essentially different that the purity of the one would be impaired by the use of the methods and results of the other.

PREPARATION OF TEACHERS

The preparation of teachers for high-school work should include a good college course, with special attention to mathematics, either by electives during the course or by some graduate study. The minimum attainment in mathematics should include analytic geometry, a first course in the calculus, and the elements of the theory of equations (including determinants).

The committee regards it as desirable that the teacher should have paid some attention, under guidance, to the pedagogy of mathematics (problems, means, and methods of instruction; if practicable, seeing actual teaching and discussing it afterward), before beginning his own teaching. Still more important is it that his first teaching should be under the careful supervision of an experienced teacher of mathematics. If possible, his first year or two of service should be explicitly and actually under the direction and guidance of older teachers. Perhaps each beginner may be assigned by his principal to some specific teacher of experience and tact, for supervision and counsel. The relation will be more or less formal, under varying circumstances; but it should always be actual and effective, never merely nominal; it should involve personal consultation, mutual class-room visits, friendly, careful advice.

Much can be accomplished in this way. At present young teachers of no experience, having no pedagogic preparation, are often put into full charge of classes, and receive no assistance, no advice, no encouragement from their more experienced colleagues. They have as model only some recollections of their impressions (as pupils) of the teaching which they received. They profit as best they can by their own experience, and learn from their own mistakes. Some never appreciate their shortcomings or how to remedy them; even for the best it is a devious and painful path to excellence, which might be shortened and eased by the judicious counsel of one who had traversed the path himself.

In institutions where there are several teachers of mathematics it would

be well for them to meet statedly for the discussion of questions of local administration, of pedagogy, of mathematical topics ; perhaps the systematic study together of some mathematical subject could be undertaken. (Among the suitable subjects for such study are the following : modern synthetic geometry, analytic geometry, the differential and integral calculus, determinants, the theory of equations, analytic mechanics, the history of mathematics.)

It is very desirable that the teacher be making year by year new acquisitions of mathematical knowledge.

CORRELATION OF WORK

Mathematics is unique in the extent to which it builds on previous work. Hence secondary-school work should be correlated as closely as possible both with grade work and with college work. The division of the work in mathematics into three portions, carried on in different institutions (grades, secondary-school, college) differing in management, methods, and aims, and with teachers differing radically in type of preparation, causes a great waste of teaching energy. Much can be done to diminish this waste by close relations between the teachers of the three divisions, and the comparison of results and adaptation of work to mutual needs. The relationship may be official or unofficial, formal supervision or friendly suggestion ; it should, however, never be a mere form, but a cordial co-operation for strengthening and unifying the work in mathematics in grades, secondary schools, and colleges.

LIBRARY

Every secondary school should have for the use of the pupils, and especially of the teachers, a carefully selected library of reference-books in mathematics (standard elementary texts, histories, tables, books of problems and recreations, and advanced mathematical works suited to the needs of the teachers). Measuring instruments should also be provided.

SUMMARY OF PRINCIPAL CONCLUSIONS

The most important of the conclusions which were reached by the committee are the following :

1. To the close of the secondary-school course the required work in mathematics should be the same for all pupils.

2. The formal instruction in arithmetic as such should terminate with the close of the seventh grade.

3. Concrete geometry should be a part of the work in arithmetic and drawing in the first six grades.

4. One-half of the time allotted to mathematics in the seventh grade should be given to the beginning of demonstrative geometry.

5. In the eighth grade the time allotted to mathematics should be divided equally between demonstrative geometry and the beginning of algebra.

6. In the secondary school, work in mathematics should be required of all pupils thruout each of the four years of the course.

7. Wherever, from local conditions, it is necessary to defer the beginning of geometry and algebra to the secondary school, here, likewise, geometry should be begun before algebra.

8. When once begun, the subjects of geometry and algebra should be developed simultaneously, in so far, at least, that both geometry and algebra should be studied in each of the four years of the secondary-school course.

9. The unity of the work in mathematics is emphasized, and the correlation and interapplication of its different parts recommended.

10. The instruction should have as its chief aim the cultivation of independent and correct thinking on the part of the pupil.

11. The importance of thoro preparation for teachers, both in mathematical attainments and in the art of teaching, is emphasized.

J. W. A. YOUNG, *Chairman*,
Assistant Professor of Mathematical Pedagogy in the University of Chicago.

J. J. SCHOBINGER, *Secretary*,
Principal of the Harvard School, Chicago.

ELLERY W. DAVIS,
Professor of Mathematics in the University of Nebraska.

THOMAS F. HOLGATE,
Professor of Applied Mathematics in Northwestern University.

L. S. HULBURT,
Collegiate Professor of Mathematics in Johns Hopkins University.

C. W. LYON, JR.,
Principal of Grammar School No. 78 (formerly Professor of Mathematics in the Boys' High School), Brooklyn, N. Y.

H. B. NEWSON,
Associate Professor of Mathematics in Kansas State University.

W. F. OSGOOD,
Assistant Professor of Mathematics in Harvard University.

JAMES BYRNIE SHAW,
Department of Mathematics in Michigan Military Academy.

B. M. WALKER,
Professor of Mathematics in the Mississippi Agricultural and Mechanical College.

SCIENCE IN THE GRADES

"Nature study" is hard to define, as it has been made to include a very miscellaneous collection of observations. Its purpose is to bring young pupils into direct contact with nature. Its chief failure has been due to the fact that this observation of nature has been often interpreted to mean exercises which are of no significance, which mean nothing when done, which are really dead mechanical work. The failure to present things of real importance arises from the fact that the teachers do not have sufficient knowledge to distinguish them. Another danger which is constantly confronting nature study is the tendency to make it a wildly imaginative and emotional subject. When a very young pupil is being trained to observe, the facts must be made to glow with interest, but not at the expense of truth or of training in the scientific habit of mind.

As one of the first tendencies that exhibit themselves in children is interest in natural phenomena, it seems natural to take advantage of this interest in the very earliest period of formal education. When observational work is lacking, and the whole contact is with conventional forms of training, the interest in observing natural phenomena fades away, and very few pupils are able to survive such treatment and retain the early impulse toward nature.

To keep the "tentacles of inquiry" functional, if not to develop them, at least two exercises in nature study each week should be provided thruout the entire pre-high-school period. Numerous sciences should be made to contribute a great variety of material, and no science should be presented in an organized form. The most available material should be selected, without any reference to scientific sequence. The material should be obvious (entering into the experience of the pupils), important, and interesting. It should be suggested by the observed interests of the pupils rather than by some pedagogical theory. It should be deliberately varied and fragmentary, and should result in that miscellaneous collection of impressions which comes to an untrained but interested observer, without any definite organization. The knowledge of the wide-awake country boy who lives out of doors is probably the best illustration of the kind of knowledge nature study is expected to bring—a magnificent background of experience for the formal organization of the sciences in secondary-school and college courses.

REPORT OF THE COMMITTEE ON PHYSICAL GEOGRAPHY

PRELIMINARY

Augustus F. Nightingale, Ph.D., Chairman of the Committee on College-Entrance Requirements of the National Educational Association:

I have the honor to submit the following as the report of the Subcommittee on Physical Geography, appointed under the auspices of the National Educational Association:

On February 24 I received a letter from Professor Charles S. Palmer, corresponding secretary of the Committee on Science of the National Educational Association, requesting me to assume the functions of chairman of the Subcommittee on Physical Geography, and formulate a final report to be submitted to you, in view of the fact that Professor Albert P. Brigham, who had been appointed chairman of that subcommittee, had departed for Europe in the hope of restoring his impaired health. Altho somewhat doubtful as to the legality of my appointment as chairman, I deemed it best to comply with the request of Professor Palmer.

At that late date it was, of course, impracticable to make arrangements for a meeting of the subcommittee. A preliminary report had been agreed upon at a meeting attended by five members of the subcommittee, in Springfield, Mass., in July, 1898. It was believed that the views expressed in that preliminary report would be in the main approved by other members of the subcommittee, most of whom had expressed their opinions more or less fully in correspondence with Professor Brigham. It seemed to me, accordingly, that the best course practicable was to submit as a final report that preliminary report, with such notes or appendices as might be suggested by correspondence with other members of the committee, or by my own reflections upon the subjects of the report. I accordingly addressed a letter to each member of the subcommittee, whether present at the Springfield meeting or absent therefrom, excepting two members who were known to be out of the country, informing them of the plan adopted, and requesting them to communicate to me immediately any suggestions they might deem important as to notes or appendices which should be added to the preliminary report. A copy of that report was transmitted with the letter to each member of the subcommittee. In addition to the members named in the preliminary report, a copy of the letter was sent to George R. Twiss, head science teacher, Central High School, Cleveland, O., who had been appointed as a representative of the North Central Association, but whose name had not been received by Professor Brigham in season for

him to be invited to the meeting at Springfield in July, 1898. The correspondence indicates that the preliminary report may be regarded as expressing substantially the views of all, or nearly all, the members of the subcommittee, altho there is, of course, difference of opinion upon some details. The report is indorsed, either unqualifiedly or with criticism of unimportant details, by J. H. Jameson, instructor in physics, Pratt Institute, Brooklyn, N. Y.; George R. Twiss, head science teacher, Central High School, Cleveland, O.; Ralph S. Tarr, professor of dynamical geology and physical geography, Cornell University, Ithaca, N. Y.; and Robert H. Cornish, assistant in physics, Girls' High School, New York city. G. L. Collie, professor of geology, Beloit College, was unable, on account of illness, to examine and criticise the report. It appears that no member of the subcommittee has expressed radical dissent from the views set forth in the preliminary report.

It is only necessary to remark further that the few notes which I have deemed it proper to add to the report are distinguished from the notes which originally formed a part of it, being inclosed in brackets.

COMMITTEE ON PHYSICAL GEOGRAPHY TO THE NATURAL SCIENCE DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION

To the Natural Science Department of the National Educational Association:

The committee appointed to consider the course in physical geography in secondary schools would respectfully report as follows:

The decision of the department at the Milwaukee meeting, to double the membership of the several natural-science committees, occasioned serious delay in the work. Diligent efforts were made to secure the additional appointments for geography. It was found in March last that three vacancies still remained; but, in order to prepare a report in time for the meeting at Washington, with the approval of Professor C. S. Palmer, the general secretary of the committee, work was undertaken, the committee being constituted as follows:

NEW ENGLAND ASSOCIATION

William North Rice, professor of geology, Wesleyan University.
W. H. Snyder, master in science, Worcester Academy.

MIDDLE STATES ASSOCIATION

Albert Perry Brigham, professor of geology, Colgate University, *chairman*
J. M. Jameson, professor in Pratt Institute.

NORTH CENTRAL ASSOCIATION

G. L. Collie, professor of geology, Beloit College.

SOUTHERN ASSOCIATION

Collier Cobb, professor of geology, University of North Carolina.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

RALPH S. TARR, professor of dynamical geology and physical geography, Cornell University.

DEPARTMENT OF NATURAL SCIENCE, NATIONAL EDUCATIONAL ASSOCIATION

W. M. DAVIS, professor of physical geography, Harvard University.

R. H. CORNISH, assistant in physics, Girls' High School, New York city.

The chairman prepared a preliminary list of questions for criticism by the several members of the committee. The following circular of inquiry was then issued as a basis of work for members of the committee and others:

1. Should a high school offer the following subjects under the general head of geography? Mathematical geography, meteorology, oceanography, physiography of the land, distribution of organisms, economic geography, geology. If geology is included, what parts of the subject should be taught? What topics should economic geography embrace?

2. In what year or years of the high-school course should physical geography have place? What studies should precede or follow?

3. What preparation in geography is to be expected from the elementary schools?

4. Outline of work for one- and two-year courses, including order and time allotment for subjects named in 1, and number of periods per week.

5. Place of geography in college-entrance requirements. Should geography be elective or required in so-called English courses? In classical courses? To what extent may geography be presented as a substitute for other subjects, particularly for other sciences?

6. Text-books.

7. Laboratory work; how related to lectures and recitations; outline of laboratory courses; use of notebooks; amount and character of field work to be done; modifications in field work or substitutions for it, in city schools.

8. Standard equipment of maps, models, photographs, lantern slides, specimens, and apparatus, for class-room and laboratory.

9. Lists of books in geography recommended for school or teacher's library.

10. Any other phase of the subject deemed important.

The several individual discussions thus prepared were embodied in this report, which was amended and approved at a meeting of the committee held in Springfield, Mass., July 1–2, 1898. Only those who were able to be present at this meeting have signed the report. The gentlemen who were not present cannot be held responsible for the views here expressed, but they have all made valuable contributions to the paper, and are believed to be in accord with most of its positions. In the case of the signers of this report, it is not to be understood that every one approves of every proposition announced as the opinion of the majority of the committee, tho all do find themselves in cordial harmony with the views of the report as a whole.

I

The committee finds itself in agreement as to the scope of physical geography, and as to the topics which should constitute parts of a high-school course in this subject. The meaning and general scope of physical geography have never been better expressed than in the words, "the

physical environment of man," used by the conference on geography in its report to the Committee of Ten. On the whole, the term "physical geography" is to be preferred to "physiography," as having in common usage a more precise definition. Physiography, in the English sense of a general introduction to all sciences, is too broad; and in the sense in which it is now employed by some American students it is not broad enough. The ideal high-school course in physical geography will neither be too general and fragmentary, nor too special and difficult. The subject should be carefully held to the leading idea of the physical environment of man; and it should be the aim to exclude a number of subjects frequently treated under physical geography, but more appropriately included under the other heads, for example, purely astronomical matter, certain principles of physics, the classification of animals and plants, and tables of the geological periods. Important and interesting as these subjects are in their proper connections, it is believed that a better mental discipline will be obtained from physical geography when all its parts are closely joined to its leading theme. It may thus provide an intellectual training comparable in value to that secured from physics, mathematics, or language, in which continuity of theme is so well maintained.

It is agreed that the earth as a globe, the atmosphere, the ocean, and the lands should be the principal themes of the course. Here one may, if preferred, use the more formal terms, mathematical geography, meteorology, oceanography, and geomorphology. A serious objection to these terms is that they do not sufficiently take human relations into account. If, however, they are employed, it is to be understood that the character of high-school work, as well as the limited time at disposal, forbid the giving of extended courses in these subjects. They must all, and especially the three former, be given in an elementary way, and all must be taught with the motive and from the special point of view of physical geography, as defined above.

The distribution of organisms should not be taught with reference to zoölogical and botanical classification, but in exposition of the organic environment of man, and as itself controlled by physiographic and other influences. Pupils should be taught the tendency of species to diffuse themselves, and the limitation of the tendency by climatic, oceanic, and topographic barriers. It will, for example, be easy to teach the influence of temperature in the establishment of zones of animal and vegetable life. The difference in the effects of deep and shallow seas as barriers to distribution should be illustrated by reference to Wallace's line, and to the faunas and floras of continental and oceanic islands. The depth and texture of soils and the quantity and distribution of ground water should be explained in relation to their control over the distribution of plants and population. The whole subject may be treated by incidental references in the chapters on the atmosphere, the ocean, and the lands, or may

form the theme of a supplementary chapter, or the two methods may be combined.

Thruout the course in physical geography every opportunity should be taken to illustrate the relation of economic products to physiographic control on the one hand, and to the distribution and condition of mankind on the other hand. If time allows, a summary of the subject might be added as a closing chapter.

In the next section of this report reference will be made to more advanced elective courses of a geographic nature which may have place in the high-school curriculum.

II

The committee recommends that the course in physical geography be generally placed in the first or second year.[1] If the elements of physical geography have been used as a basis for work in geography in the elementary schools, then physical geography in the high schools might perhaps be a relatively advanced course in the fourth year, using the materials afforded by the study of physics, chemistry, and biology in the previous years. It is, however, the opinion of the majority of the committee that, under any conditions, the study of physical geography should come early in the high-school curriculum. Certainly this is the case as matters now stand. It would be unwise to allow pupils to reach the age of eighteen years, or thereabout, without attaining the broad way of looking at the earth that physical geography, of all subjects, gives.

Additional reasons for introducing the subject at an early stage are found in the fact that only a small part of the pupils who enter the high school complete the curriculum, and in the further consideration that the subject can, without deranging the general order of studies, in some cases be taken by those who are preparing for classical courses in college. The committee deems it entirely practicable to teach good courses in elementary physical geography without previous courses in other sciences. The qualified teacher will readily supply any needed chemical or physical principles. In some cases rudimentary instruction in physics and chemistry has been given in grammar-school courses.

Advanced elective subjects of a geographic nature may be offered late in the curriculum. Among these is geology. It is agreed that the larger share of the time should be given to the dynamical and structural phases of the subject. Only the simplest facts about minerals and rocks can be given, and such difficult dynamical subjects as metamorphism and vulcanism can only be treated in a general way. It will be possible for a competent teacher to give effectively the elements of historical geology, especially if good museums or localities for fossils be at hand. Detailed

[1] [The majority of those who have expressed a preference as between the first and second years prefer the first.]

instruction in historical geology is too difficult for high-school pupils, and should not be attempted.

The course in geology should, if practicable, follow those in physics and chemistry, probably in the last year of the curriculum. In dynamical and structural geology the subjects treated will necessarily be, to some extent, the same as those in the earlier work in physiography. But the treatment of these topics in the course on geology will be in less degree simply descriptive. For instance, in the earlier course, some general ideas of the work of running water and the development of topographic forms can be given. In the later course the work of running water should be explained in relation to the laws of energy, the steam being considered as a falling body. In the course of physical geography the general action of the atmosphere in the decay of rocks can be presented; but in the later course in geology the nature of the chemical changes involved in weathering should be illustrated. In general, dynamical geology should be regarded as the chemistry and physics of the globe, and the conduct of this course must, therefore, presuppose a knowledge of chemistry and physics on the part of the student. If the pupil has studied zoölogy, or botany, or both, during the early years of the curriculum, it will be possible to make an outline of historical geology more intelligible than it could otherwise be.

The committee approves of the suggestion that an advanced elective course in meteorology may be introduced, if the number and qualifications of the teachers render it practicable. Such a course would probably come in the last year, accompanying or following a course in physics. Such a course would sustain to the meteorological chapters in physical geography a relation similar to that which the course in geology bears to that section of physical geography which concerns geological processes.

If a course in astronomy is offered in the later high-school years, it would follow as a natural expansion of the chapter on the earth as a globe.

If a later course in physical geography should be introduced, it might be either as an expansion of the first course, with more advanced treatment, or a course on the physical features of some land area, preferably the United States.

Altho it has seemed worth while to give brief indication of the nature of the four advanced courses above outlined, it is not desired to imply that all high schools should at present offer all, or indeed any, of them. The chief interest of the committee is in the establishment of a well-considered elementary course.

III

It may be reasonably expected that, in the teaching of geography in the elementary schools, a good beginning will have been made in acquainting the pupil with the conceptions of physical geography. Geographical

teaching has greatly improved in the last two decades, and much is to be expected in the near future from the current agitation in this field. Frye's *Complete Geography*, and the *Natural Advanced Geography* by Redway and Hinman, illustrate the kind of knowledge which may be expected to be acquired in the grammar schools. Teaching that deals with mere matters of location may with advantage be replaced by the introduction of the causal notion.

IV

The committee desires to emphasize at the outset that no one curriculum can be the best for all high schools. No outline of work can be made to fit all conditions. It is of doubtful utility to give to teachers at large anything more than a very general outline, which may offer suggestion and prove a help and incentive to better things. Not less than four periods per week for one year should be assigned to the proposed elementary course in physical geography. Five periods would be better. Periods of less than forty-five minutes each would be inadequate; and, in any case, two periods per week should be scheduled together, to be used, if desired, for field or laboratory exercises.

Of the leading subjects—the earth as a globe, the ocean, the air, and the land—the first should occupy the least time, and the others should have an increasingly larger allowance, in the order given. Adequate treatment of the features of the land will require as much time as the other three subjects combined, and it may be more.[1] If the distribution of organisms and economic geography are treated as separate subtopics, the time allotted to them must necessarily be short. As regards the whole question of proportion, it must again be said that much depends on the teacher and the environment. A teacher in a school situated near the ocean might give much attention to the features of the shore line, while one in the interior might give a larger share of attention to plains or mountains.

It is not deemed necessary to present in this report detailed outlines of teaching material. Recourse should be had to text-books, school journals, and especially to the report of the conference on geography to the Committee of Ten.

Nor it is thought best to give estimates of time for the advanced elective courses which have been suggested, believing that time allotment must vary with the views of teachers and the conditions of schools. If the association desires the committee to go farther into the question of outlines, it will be glad to receive instructions on that point.

V

Recalling the fact that the Committee of Ten places physical geography as a requirement in the first year of all high-school courses, your

[1] [One member of the subcommittee regards the last clause of this sentence as an overstatement.]

committee desires to express its agreement with this indication of the importance of the subject, in the hope that it may be made accessible to all. The committee would, however, hesitate to propose the prescription of the study for all, but does strongly urge that physical geography be required in all English high-school courses. It also believes that it should be elective in classical courses, either on the same footing with all the other sciences, or in a position secondary to physics, as indicated below.[1]

The attention of educators has been of late repeatedly called to the truth that a four-years' course consisting almost exclusively of classics and mathematics, with scant recognition of English literature, practically no modern history, and no physical or natural science, is a course so unsymmetrical as to be a monstrosity. The relation of the different educational institutions to each other ought to be such that a course preparatory to college will also be a course well adapted to fit the student for the later work of life, and for social and civil duties, in case he should fail to take a college course. It cannot be claimed that the present classical course in high schools, constructed with reference to the classical course in colleges, makes any approximation to this result. The student who has completed a high-school course in preparation for the classical course in college has gained, not a tolerably complete and symmetrical education as far as it goes, but a wretched torso of an education. Nor is the exclusion of science injurious only to those whose studies are interrupted at the end of the high-school course. For those who enter college, the ignoring of the study of nature in preceding years tends to unfit them for success in such studies. Their powers of observation and imagination of physical phenomena are well-nigh atrophied by disuse, and they have lost their native curiosity about the world in which they live. It would tend to correct this evil if a certain amount of science were required for admission to the classical course. Physical geography would be one of the most suitable subjects to be thus required; but, in the present unsettled and transitional condition of our educational system, it would probably be better for the colleges to allow an option among several scientific subjects.

Taking the point of view of the college, the sentiment of the committee is that physical geography should not be required for entrance to any of its courses, but that the college should accept it as a part of the preparation for any course, when pursued for not less than one year, provided the teaching has attained a proper standard of excellence. In its relation to physics, chemistry, zoölogy, botany, and physiology, several members of the committee believe that geography should stand on a perfectly equal footing, as an alternative requirement, but some would assign

[1] [Two members of the subcommittee believed that, if one science is to be preferred to another, as a study in the classical courses in high schools and a condition for admission to college, physical geography, rather than physics, should be preferred.]

to physics distinctly the first place. Those who take this view, however, would insist that geography be accepted as an alternative for any other scientific subject. The college should not fail to set serious tests in geography, where given at all.

VI

The number of text-books which represent the best current standards of high-school geography is not large. Several now before the public are fairly well adapted for class use. Their titles will be found in the annotated list to which reference is made later in this report. In the use of these books, as well as in the preparation of new ones, it is hoped that the definition of the subject, as already given, will be carefully regarded. The earth in relation to man should receive sustained emphasis, and irrelevant scientific matter should be reduced to a minimum. A number of good text-books are available in the subjects suggested for advanced elective courses.

VII

Field and laboratory work should receive emphasis in every high-school course in geography. So far as practicable, the lectures, discussions, and recitations should be related to such work. Notebooks should be carefully kept, but their importance should not be emphasized in an artificial way. It is possible for a pupil to make a handsome notebook while entering little into the spirit of the subject.

Field work during the open season should take the place of at least half of the laboratory work, if conditions allow. It must not be forgotten that the field is, from one point of view, an out-of-door laboratory. The teacher must plan the work according to circumstances, but it should certainly include practice in the making of sketch maps, study of the development of the land forms, and observation of the distribution of plants on a small and varied area. In most cities except the largest,[1] field study can be accomplished without serious difficulty by short excursions into the country. Such work is strongly recommended. The interest attaching to such trips will frequently enable the teacher to place them in afternoons and holidays. Field work has been undertaken with favorable results in Buffalo, Chicago, and elsewhere. The report of the Chicago committee for preparing a syllabus in physical geography includes a valuable list of such possible trips for the use of the teachers of the city. Eleven excursions are scheduled, giving route and cost of round trip, and naming the phenomena to be seen and studied. The latter include stone quarries, streams, bowlders, and glacial topography, sand dunes, lake shores, and a large museum. Preparation of similar guides for other cities would greatly advance this kind of geographic study. Chicago is

[1] [One member of the subcommittee protests that on this point there is no need of recognizing any exceptions.]

not an exception. An equally important group of facts is assembled in the vicinity of nearly all cities.

Laboratory work in geography is comparatively new to the schools at large, and hence suitable manuals or outlines are few; but sufficient bodies of suggestion are at hand for good beginnings. One member of the committee has contributed the following, which is here included, not as a specific guide, but by way of informal suggestion:[1] (Figures in parentheses indicate the number of hours for each exercise.)

Cause of day and night, and extent of sunlight over surface. (1)
Determination of latitude, north-and-south line, and high noon. (1)
Determination of difference of longitude by sending watch. (1)
Finding variation of local and standard time. (1)
Making maps on different projections. (4)
Study of ocean-current maps. (1)
Study of tide charts. (1)
Study of map of the world, showing heights of land and depths of sea. (2)
Difference in temperature between the top and bottom of a hill. (1)
Finding height of hill or building by barometer. (1)
Determination of dew-point. (1)
Making isotherm and isobar maps from furnished data. (4)
Study and reproduction of weather map. (1)
Predictions from weather maps (written with reasons). (2)
Observations of rain-fall, temperature, velocity of the winds, etc.
Determination of the amount of snow-fall and the amount of water produced by an inch of snow. (1)
Observations of ground temperatures, depth of frost, etc.
Making contour and hachure maps from small models. (2)
Drawing cross-sections from contour maps. (4)
Written descriptions of models. (4)
Picture-reading (written description). (4)
Map-reading (written description). (4)
Reproduction of contour map in hachures. (1)
Making map of small area in neighborhood. (1)
Planning of journey, with study of country to be seen. (4)
Determination of the amount of sediment carried by a stream. (1)
Study of rocks and minerals. (10)
Study of erosion by sprinkling-pot. (2)
In fall, four excursions, one a week. (8)
Four excursions in spring. (8)

For another laboratory outline which has been tested by actual experience, see "Laboratory Work in Elementary Physical Geography," by R. H. Cornish, *Journal of School Geography*, June and September, 1897.

VIII

There cannot be a uniform or standard equipment of apparatus for geographical teaching. It is sought here only to give such suggestions

[1] [One member of the subcommittee considers some of these exercises too difficult, or otherwise unsuitable. It will be understood that the list is given, not as a program to be followed, but as a suggestion to be considered.]

as may enable teachers and schools to acquire, without serious mistake or delay, materials for effective work. Maps and photographs will naturally predominate, and slides and projecting apparatus should be added, if possible, with the more common meteorological instruments. Care should be taken to secure illustrations well related to the systematic progress of the work. For example, under land forms, the illustrations introduced should be chiefly directed to explaining their causes and consequences rather than to the production of striking pictorial effects. A set of about one hundred classified lantern slides selected by W. M. Davis, chiefly from the Gardner collection of geological and geographical photographs of Harvard University, can be purchased from E. E. Howell, Washington, D. C. Some of the more important materials, such as the topographic maps of the United States Geological Survey, cost but little; and much material may be had free of cost, from official surveys, or as gifts from individuals interested in the school. Some account of these and other official maps may be found in "Governmental Maps for Use in Schools," published by Henry Holt & Co., New York.[1] Models serve a useful purpose, if their vertical scale is not too much exaggerated. Among those that may be mentioned are a number made by E. E. Howell, Washington, D. C., and the "Harvard Geographical Models," published by Ginn & Co., of Boston.

Suggestions concerning the use of these topographical maps in schools have recently been published by the departments of public instruction of Massachusetts, Rhode Island, Connecticut, and New York. Similar publications would be useful in other states. An important publication of the United States Geological Survey has lately been begun in the "Topographic Atlas of the United States," of which the first folio, entitled *Physiographic Types*, by Henry Gannett (price, 25 cents), will be found of much practical service. Other folios of this series are promised for the future.

It is believed that school boards will in the end furnish appropriations for geography as freely as for physics or chemistry, if the needs of geography are duly appreciated by superintendents, principals, and science teachers. Abundant allowance of time should be given to secondary teachers of geography, to perfect their equipment, and to work out the new problems with which they have to deal.

By way of further suggestion, the teacher is referred to an article on the "Equipment of a Geographical Laboratory," by W. M. Davis, in the *Journal of School Geography* for May, 1898. The following list also indicates an equipment found practically useful by one member of the committee: good globe, small globes (25 cents), one for each two pupils,

[1] Since the publication of this book, the free distribution of the pilot charts of the North Atlantic, issued by the United States Hydrographic Office, and of the topographical maps published by the United States Geological Survey, has been suspended. The charts and maps are now sold at a very low price by the respective bureaus of publication. The method of purchasing the maps issued by the Geolgical Survey is explained in the *Journal of School Geography* for September, 1897.

plumb-bobs, vertical standards for the determination of latitude, Kiepert's "Physikalische Wanderkarten" (Europe, Asia, North America, South America), "Weltkarte zur Übersicht der Meerestiefen und Hohenschichten," small compasses, bright, thin metal dishes for the determination of dew-point, blank weather maps, co-ordinate paper, thermometer, barometer, rain gauge, tide charts, ocean-current maps (copies from Challenger expedition), small wooden balls, small outline maps, sprinkling-pots and boxes, a few typical charts, geological maps, United States contour maps (sufficient duplicates of some sheets to give one to each pupil), Harvard geographical models, fragments of models for contour-drawing, maps of different projections, a few English hachure maps, photographs and pictures, stereopticon and views, several atlases, collection of rock and mineral specimens, enough for each pupil, if possible.

For illustration of the structures and processes concerned in the development of land forms, there should be specimens of the common rock-forming minerals, and of such rocks and structures as are important in determining topographic forms, or have economic value. Thus there should be sandstones, conglomerates, shales, and limestones, lavas, specimens showing faults on a small scale, slickensides, crumpled lamination, ripple-marks, raindrop impressions and sun-cracks, glacial bowlders and glaciated surfaces, stalactites and stalagmites. If an advanced course in geology is given, the amount of such material as has been indicated above should be materially increased, and some fossils should be added. In all cases care should be taken to avoid such jumbles of miscellaneous minerals and fossils as often make up collections so-called.[1]

IX

An annotated list of text- and reference-books has been prepared by Miss Mary I. Platt, recently of Radcliffe College, now teacher of geography, High School, Holyoke, Mass. The list, including fifty titles, has been examined and criticised by W. M. Davis and R. E. Dodge, and is published in the *Journal of School Geography* for May, 1898. This is by no means intended to be exhaustive of useful books, but outlines a useful beginning of a school library which might to advantage be greatly increased. It is further suggested that the *Journal of School Geography* is the most important help with which teachers of the subject can provide themselves.

X

PREPARATION OF THE TEACHER

It is not to be expected that notable success in this or any other subject will be attained, if attention is so far turned to the outline of the

[1] [Mr. Cornish has furnished a list of apparatus for physical geography recently purchased for the high schools of New York city. As the list may be useful to teachers by way of suggestion, it is presented as an appendix to this report.]

course or the equipment of the schoolroom that the preparation of the teacher is forgotten. The committee, therefore, wishes to emphasize three points that are of prime importance in this connection. The training of the teacher should have reached a distinctly higher grade in physical geography than that of the course to be given. It should include laboratory courses in physics, chemistry, botany, zoölogy, and geology, and it should have developed ability to take advantage of the local phenomena in the neighborhood of the school in the conduct of field work. These considerations should weigh in the selection of new teachers. Teachers already employed and of good experience in their work should be urged to supplement their preparation, if deficient in any of the lines above indicated, by attending serious courses in teachers' classes and summer schools, as far as practicable with due regard to rest and health.

A primary object of this report has been to attempt a rational definition of physical geography, and to offer to teachers and school authorities a line of suggestion in organizing geographic instruction especially to secure a sound elementary course in the early years of the high school. Minute and specific directions are undesirable, because a great variety of conditions must be met, and the new must be built upon the old. A further object here sought is to set forth practicable views of the co-ordination of geography with the other sciences in the high-school curriculum, and of geography as a factor in satisfying college-admission requirements. The results, of course, are tentative. It is not thought that this committee, and the other committees with which it is associated, can formulate a rigid or final plan for all schools, but an approximation toward unity can be made, with advance upon the chaotic conditions of secondary science instruction in the past.

The committee would be glad to be continued for another year, in order that, profiting by the discussions of its conference already held, and by such criticisms as the publication of the present report may evoke, it may embody the results of further consideration in a subsequent report.

Albert Perry Brigham.
Collier Cobb.
W. M. Davis.
William North Rice.
W. H. Snyder.

Which is respectfully submitted.

William North Rice,
Acting Chairman.

APPENDIX

APPARATUS FOR PHYSICAL GEOGRAPHY RECENTLY PURCHASED FOR THE HIGH SCHOOLS OF NEW YORK CITY

MAPS.

1 set (6) Habernicht & Sydow physical wall-maps. Hemispheres, Asia, Europe, North America, South America, Africa.
1 bird's-eye view, United States.
1 blackboard outline, United States.
1 blackboard outline, middle and eastern United States.
1 physical map, Switzerland.
1 Guslin's definition map.

GLOBES AND MODELS.

1 12-inch Joslin globe.
1 12-inch slated globe.
1 model, United States, E. E. Howell, Washington, D. C.
1 model, New Jersey, E. E. Howell, Washington, D. C.
3 Harvard geographical models.

GOVERNMENT MAPS.

1 geologic atlas, New Jersey, New Jersey Geological Survey.
9 selected geologic folios, United States Geological Survey, Washington, D. C.
335 selected sheets, topographic atlas, United States, including complete sets of Massachusetts, Connecticut, and Rhode Island, and Pennsylvania and New York as far as published, as well as maps of other states.
3 special geologic sheets, United States Geological Survey.
1 set Mississippi river (preliminary) charts, Mississippi River Commission.
1 set flood plain, Mississippi river, Mississippi River Commission.
22 lake-survey charts (selected), United States Great Lakes Survey Commission, Detroit, Mich.
67 selected coast-survey charts, United States Coast and Geodetic Survey.
46 pilot charts of Atlantic and Pacific oceans, United States Hydrographic Office.
Blank weather maps, Form D, United States Weather Bureau.

PICTURES AND LANTERN SLIDES.

126 selected lantern slides.
54 selected mounted photographs of natural scenery, 12×10.
50 selected mounted photographs of natural scenery, 6×7.
12 selected mounted photographs of natural scenery, 12×14.
6 selected mounted photographs of natural scenery, 7×8.
1 set (5) photochromes, 18×20.
2 Alpine photographs (large).
1 set (37) Holzel's geographical pictures.

MINERALS AND ROCKS.

1 set prepared slides of mineral and rock sections.
6 boxes selected mineral specimens, 40 specimens each of 40 different minerals.
2 boxes selected rock specimens, 40 specimens each of 20 different rocks.

METEOROLOGICAL APPARATUS.

1 barograph.
1 thermograph.

1 exposed thermometer.
1 solar radiation thermometer.
1 aneroid barometer.
1 standard (mercurial) barometer.
1 set maximum and minimum thermometers.
1 soil thermometer.
1 wind-vane and anemometer.

SPECIAL REPORT OF THE COMMITTEE ON CHEMISTRY

PRESENTED TO THE COMMITTEE ON COLLEGE-ENTRANCE REQUIREMENTS OF THE NATIONAL EDUCATIONAL ASSOCIATION

I. VALUE AND PLACE OF CHEMISTRY

The study of chemistry is a valuable constituent of the high-school course on account (1) of the training in observation in general and correct induction from observation which it affords, and (2) of the first-hand information which it gives about well-known materials, the principles of their manufacture, and their properties, as the result of personal observation.

The college invites its study in preparatory schools on account of these two benefits. To be of subsequent use the method and content of the courses in preparatory schools must be definite and uniform. The selected matter must be thoroly taught, so as to form a recognizable constituent of the preparation of those who present it. When these conditions are fulfilled, the college must give proper recognition to the work. All colleges must give admission credit for the subject. In addition to this each college must provide definite means for advancing the entrant in chemistry to an extent corresponding to his previous knowledge of the subject. The precise method of doing this will depend upon the nature of the courses the college itself offers. In any case no pupil who offers chemistry for entrance, and receives definite credit for it, should be placed in the same class with beginners who had no such credit.

Without laboratory work school chemistry is wholly valueless for the purposes just mentioned. It should be preceded by physics, since chemistry necessarily assumes a knowledge of the physical properties of matter and of the phenomena connected with heat and electricity. If, on account of limited teaching force, relatively little time can be given to the sciences, it is more desirable to give a year each to one or two sciences than shorter periods to a larger number. It must be remembered that, for the

efficient teaching of science, preparation of apparatus and experiments for demonstrations and laboratory work are necessary, and the science teacher cannot, therefore, carry more than half the number of recitations assigned to most other teachers.

OUTLINE OF A ONE-YEAR COURSE

The work outlined below will demand at least 200 hours' work; about half the time, in two-hour periods, should be spent in the laboratory.

II. METHOD OF TEACHING

Laboratory work.—The experiments must be performed by each pupil individually.

Each pupil must record his observations and the interpretation of them in a notebook. His work should be continuously supervised and his records frequently examined by the teacher.

Most pupils will tend to fall into merely mechanical performance of assigned work. To combat this is the most difficult task of the teacher of chemistry. Each experiment is a question put to nature, and forethought and care are necessary in putting the question, and study and reflection in interpreting the answer. Strenuous effort is required to make the pupil realize this. The questions incorporated in the laboratory outline, to which answers are expected as part of the notes; individual questioning in the laboratory; above all, frequent, thoro quizzing of the whole class, are the best means of forcing the significance of this practical work into the foreground.

Beginning at an early stage in the course, simple quantitative experiments should be given, in order to illustrate the laws of definite and multiple proportion, the determination of combining and equivalent weights, the specific gravity of gases, etc. This will enable the pupil to appreciate the fact that, altho the quantities used in the majority of laboratory exercises may not be measured, yet the proportions and the compositions by weight of substances involved in all chemical changes are definite and measurable. Without such measurements atomic weights will seem purely mythical. Not less than six such exercises should be given. One or two of these experiments must be introduced early, in order that formulæ and equations, when the time for their employment comes, may be given as abbreviated expressions of the results of quantitative measurements.

Qualitative analysis is a branch of applied chemistry, and cannot be learned otherwise than mechanically without a long preparation in general chemistry. There should be no pretense of teaching it in a secondary school as part (much less as the whole) of the first year's work. It gives a distorted view of the classifications of the elements and of the relative importance of their properties, and bears the same relation to the science

of chemistry that the Linnæan system of classification in botany bears to the natural.

Yet exercises on the recognition of chemical substances will tend to fix their properties in the mind and give a useful review of many of the facts and principles of the science, provided that a proper method of conducting them be pursued. Analytical tables encourage mechanical work in a remarkable degree, and cannot be permitted. An outline suggesting suitable dry- and wet-way experiments, which will throw the burden of thought and rigid proof on the pupil, will be a sufficient guide. This part of the work may fitly occupy five or six weeks of the course.

Class-room.— Many parts of the subject can best be introduced by means of carefully reasoned and fully illustrated demonstrations by the teacher. Sometimes also this method of teaching has to be used where the apparatus is complicated and cannot be supplied to each pupil, or where, in striving to make the experiment successful, the pupil will be in danger of wasting time. Thus on pedagogical or practical grounds some of the Hofmann experiments for illustrating the application of Avogadro's hypothesis (explosion of hydrogen and oxygen, electrolysis of hydrochloric acid, etc.) are best performed by the teacher. (No teacher should fail to read Hofmann's admirable *Lectures on Modern Chemistry*, 1865.) The line of thought to be developed in connection with the experiments performed by the teacher and by the pupil is well given (pp. 1–9) in the Harvard *Requirements in Chemistry* by Professor Richards.

The theories and principles must be presented inductively. They should not be stated as dogmas, or as if they were part of the facts. They should be held in reserve until some accumulated facts demand explanation and correlation. Facts incapable of correlation should be avoided as far as possible. On the other hand, explanations by the handy affinity idea are worse than useless, as they are generally pure nonsense. When symbols and formulæ are first introduced, special care must be taken to show how they are derived from quantitative measurements. The pupil's own observations and other examples must be used to show how the formulæ, and finally the equations, are reached as expressions of quantitative relations. The whole process of determining the proportions by weight and constructing the formulæ and equations must be done or described in connection with every chemical change, until the pupil is thoroly familiar with the operation and the exact significance of the equation is perfectly clear (cf. Harvard pamphlet already mentioned (p. 24) on this point). Formulæ must on no account be used before this can be done, as otherwise they will inevitably appear to be the source of information instead of the receptacle for it. All "exercises in writing equations" and rules for constructing them, as if they were mathematical expressions, must be rigidly excluded as fantastic and misleading. The misuse to

which equations have been put has led to their omission or prolonged postponement by some teachers. Their introduction at an early stage can do no possible harm, provided the laboratory work contains exercises specifically intended to illustrate the way in which the facts recorded in the equations are ascertained and the manner in which the equations are constructed from these facts. The atomic theory should not be introduced until after this experimental foundation of the equation is thoroly familiar. The equation has no necessary connection with this theory. The teacher will derive valuable hints in regard to method from Perkin and Lean's *Introduction to Chemistry*.

Library.— Interest in the study should be fostered by providing a small library. The use of this will counteract the idea which the pupil may possibly receive that the text-book employed in the class is a "complete" treatise. It should contain some more advanced works, as well as some of a more popular nature.

III. SUBJECT-MATTER

The following outline includes only the indispensable things which must be studied in the class-room and laboratory. The material is, for the most part, common to all elementary text-books and laboratory manuals. Each book makes its own selection of facts beyond this which may be necessary for the illustration of the principles of the science. The order of presentation will naturally be determined by each teacher for himself.

Outline.— The chief physical and chemical characteristics, the preparation and the recognition of the following elements and their chief compounds: *oxygen*, *hydrogen*, *carbon*, *nitrogen*, *chlorine*, *bromine*, *iodine*, fluorine, *sulphur*, phosphorus, silicon, potassium, *sodium*, calcium, magnesium, *zinc*, copper, mercury, silver, aluminium, *lead*, tin, *iron*, manganese, chromium.

More detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as: water, hydrochloric acid, carbon-monoxide, carbon-dioxide, nitric acid, ammonia, sulphur-dioxide, sulphuric acid, hydrogen-sulphide, sodium-hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flames, acids, bases, salts, oxidation and reduction, crystallization, manufacturing processes, familiar substances (illuminating gas, explosives, baking powder, mortar, glass, metallurgy, steel, common alloys, porcelain, soap).

Combining proportions by weight and volume; calculations founded on these and Boyle's and Charles' laws; symbols and nomenclature (with careful avoidance of special stress, since these are nonessential); atomic theory, atomic weights and valency in a very elementary way; nascent state; natural grouping of the elements; solution (solvents and solubility

of gases, liquids, and solids, saturation); ionization; mass action and equilibrium; strength (= activity) of acids and bases; conservation and dissipation of energy; chemical energy (very elementary); electrolysis. Chemical terms should be defined and explained, and the pupil should be able to illustrate and apply the ideas they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts.

The facts should be given as examples from various classes, and not as isolated things. Thus to speak of a "standard method of preparing hydrogen," whereby the action of zinc on hydrochloric acid is meant, shows narrow and infertile teaching. It should be shown that all acids are acted upon by a certain class of metals to produce hydrogen. Examples of both classes of metals should be given and the general principles derived. The reason for using zinc and hydrochloric acid in the laboratory can then be stated.

IV. EQUIPMENT

Chemistry cannot be taught satisfactorily without a proper laboratory and a sufficient supply of apparatus. The former should contain desks, with gas and water connections, bottle racks, and well-ventilated hoods. Each pupil should have his own set of apparatus.

In view of the prevailing idea that quantitative experiments require expensive apparatus, it may be mentioned that a balance with case (Becker No. 31) — costing, when imported duty-free, $15 — and weights ($1.25) will amply suffice, and some teachers secure good results by giving each pupil ordinary hand-scales, costing less than $1.50. There should be one balance to every six pupils working at one time. In addition to this the following will be required:

Barometer; thermometers; burettes, two for four pupils at least; porcelain crucibles for each student; bottle for aspirator (one liter) for each student.

Most of the apparatus for demonstrations can be made by the teacher by use of the blowpipe, some glass tubing of various sizes, and a few pieces of thin platinum wire.

It may not be out of place to add that a teacher competent to instruct a class after the fashion indicated here must have had considerable training in the several branches of the sciences. His minimum equipment will be: physics (one year), general chemistry (one year), qualitative analysis (two terms; one term = twelve weeks), quantitative analysis (one term), theoretical chemistry (one term), organic chemistry (one term), some acquaintance with the history of the science, and familiarity with all the chief books suitable as works of reference in connection

with such a course, and all the text-books for secondary-school chemistry.

ALEXANDER SMITH, University of Chicago, *Chairman.*
W. B. GRAVES, Phillips Academy, Andover.
E. F. SMITH, University of Pennsylvania.
FRANK ROLLINS, Boys' High School, New York.
W. T. VAN BUSKIRK, High School, Peoria, Ill.
W. L. DUDLEY, Vanderbilt University.
C. F. MABERY, Case School of Applied Science.
G. W. BENTON, High School, Indianapolis, Ind.

EXCEPTIONS BY PROFESSOR P. C. FREER

In discussing the above report, I would beg to make the following additions and exceptions :

I advise the omission of the determination of the specific gravities of gases. My reasons are as follows :

With the pupil's knowledge and the apparatus at his disposal, the result must be more or less inaccurate. Inaccuracy in quantitative experiments robs them of their significance. The laws of definite and multiple proportions are *exact*, and, if they are to be illustrated by quantitative experiments, *exact* results are necessary.

Hofmann's *Einleitung in die moderne Chemie* is a very admirable work, but, in my opinion, the gas laws are dealt with at unnecessary length, and their importance is exaggerated. For the purpose of the teacher, such works as Lothar Meyer's *Elements of Theoretical Chemistry*, or Ostwald's *Outlines of General Chemistry*, are better ; they also give the gas laws, and many other important things in addition.

I cannot agree with the introduction of many commercial processes in an elementary course. The course in chemistry is for the purpose of *education*, and mere information is not education. The time is all too short as it is, and the attention should not be distracted from fundamental principles. Many commercial processes are of such a complex nature that a considerable chemical knowledge is necessary for their understanding, so that, as a consequence, the information must be conveyed to the beginner empirically. In chemical teaching, at present, this method is used to excess, so that I deprecate calling especial attention to the matter.

In my opinion, accurate quantitative results can only be obtained by means of a sensitive balance, the cost of which is from $40 to $50. I fail to see how hand-scales can give more than approximate results.

The best and most accurate quantitative experiments for beginners are, in my opinion, volumetric in character. For this purpose, experiments in titration, involving the neutralization of hydrochloric and sulphuric acids by caustic soda and caustic potash, are well adapted. The

solution of known titer can be prepared by the teacher in bulk and kept in stock. The pupil should calculate equivalent weights of bases and acids.

I would rather see the time spent in training the teacher in qualitative analysis in part devoted to organic chemistry and to physical chemistry. With a good training in general organic and physical chemistry, the high-school teacher is better equipped for his work than he would be were he to devote his time more extensively to analysis, to the detriment of other branches. By this I would have it understood, however, that the study of such a book as Ostwald's *Foundations of Analytical Chemistry* would meet my objections.

P. C. FREER, University of Michigan.

Professor Freer's opinions on Hofmann's work and on commercial processes are not inconsistent with anything in the report. In fact, I believe they express the views of the committee on these subjects. Qualitative analysis cannot be taught scientifically otherwise than on a basis similar to that outlined in Ostwald's *Scientific Foundations*.—ALEXANDER SMITH.

REPORT OF THE COMMITTEE ON BOTANY

OF THE SCIENCE DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION

It does not seem necessary to discuss the proposition that contact with the phenomena of life should form a part of the training of the secondary schools. If this be granted, either plants or animals, or both, are to be studied. In case both are studied, it is the judgment of your committee that they should be studied consecutively, and not intermixed. The two lines are entirely divergent, and to study plants and animals alternately leads to confusion, and often to entire misapprehension. All of the fundamental principles of biology can be obtained from either line.

A. Probably the most common method of teaching botany in the secondary schools is to conduct recitations, which are little more than definitions of the parts of flowering plants, and to demand as practical exercises the preparation of a small herbarium, and the analysis of a certain number of flowers in accordance with some "key." In the judgment of your committee this method is entirely inadequate. It deals with but a small portion of the plant kingdom, and presents the least important details of that portion. It brings no conception of plants as living things, and develops no biological principles.

B. A newer method, and one prevailing in the larger and better-equipped secondary schools, is organized upon a far more rational basis.

It seeks to present the essential structures of the whole plant kingdom by the examination of a series of types, and the facts observed are co-ordinated by a text-book or by lectures. The method involves the almost continuous use of the compound microscope. In the judgment of your committee the compound microscope is both useful and necessary in the demonstration of many important structures that should be brought to the attention of secondary-school students, but its excessive use in the first contact with plants is to be deplored. The compound microscope is a difficult piece of apparatus for a young student to use intelligently, a proper interpretation of that which is seen demanding considerable training, involving more total time and longer periods than are given in secondary schools. Another danger of such a course is that the contact with plants is one of structure rather than of function, and details of minute structure are not related to previous or subsequent experience, except in the case of very few secondary-school pupils; besides, it involves a needlessly extensive and difficult terminology at the first contact.

Such a course as that referred to above may be conducted to great advantage in schools with small classes, good equipment, liberal laboratory periods, and experienced teachers, but this combination of conditions is not present in the vast majority of secondary schools.

C. A third method is suggested in this report, and is based upon the following principles: the standpoint of observation should be that of plants as living things and at work, details of structure being entirely subordinated; observation should be directed to the most obvious facts, those which form a fitting background for subsequent study, and which easily enter into the subsequent experience of those who do not study further, making the work result in a permanent possession; professional terminology and difficult and expensive apparatus should be avoided as much as possible, the proper place for these being in college and university courses.

D. With these principles in view, it would seem that the first contact should be with plants in their general relations, forming the natural covering of the earth's surface, and holding definite relations to their environment. In addition to the observation of essential life-relations, the most important life-processes should be demonstrated. To develop some elementary knowledge of the life-relations and life-processes of plants will demand at least a half-year of work, and is the phase of botany that will count for the most, if but a half-year is given to the subject. Naturally such a contact with plants will involve some knowledge of the great groups and their essential structures.

E. In case a second half-year is given to botany, it should be devoted to a course in general morphology. Some knowledge of the structure of plants will have been developed during the work of the first half-year, but during the second half-year the standpoint of structure is made more

prominent, and the evolution of the plant kingdom is traced. For this part of the work compound microscopes and the ordinary laboratory equipment will be necessary. On account of previous training, the type plants selected for study will be related to their proper surroundings, their most obvious relations and processes will be known, and hence their structure will have some significance.

In no case should structure be considered apart from function, so that the course should involve a continuance of experiments in plant physiology.

F. An outline of suggested courses is herewith appended, the first course being for a half year of work, the second course being added to the first for a whole year of work.

FIRST COURSE

1. THE GREAT PLANT GROUPS.—Before undertaking the study of plants in their relations, it will be necessary to give some general training in the recognition of great groups. In a few exercises the pupil may be taught to recognize, in a general way, algæ, fungi, liverworts, mosses, ferns, equisetums, club-mosses, gymnosperms, monocotyledons, and dicotyledons. It should be understood that this preliminary training is not to develop much knowledge of the structures of these groups, but merely to enable the student to recognize them in laboratory and field work.

2. LIFE-RELATIONS AND -PROCESSES.

(1) *The foliage leaf as a light-related organ.*

a) This fact explaining its position, its form, the relation of leaves to each other.
b) The structure: demonstrating epidermis, stomata, mesophyll, chloroplasts, veins.
c) Functions: demonstrating photosynthesis, transpiration, respiration.
d) Protection of mesophyll: palisade cells, cuticle, hairs, movements, etc.
e) These relations and functions in green plants without foliage leaves.

(2) *The stem as the leaf-bearing organ.*

a) Stems bearing foliage leaves, the problem of foliage display being studied in connection with subterranean, prostrate, submerged, climbing, and erect stems.
b) Demonstrations of movements of water and elaborated material, growth, heliotropism, etc.
c) Compare stem structure of different types.
d) Stems bearing scale leaves, being connected with protection, or storage, or vegetative propagation, prominent examples being the bud, the tuber, and the rootstock types.
e) Stems bearing floral leaves, the flowers being studied as to pollination and seed dissemination, but not as to their extensive terminology.

(3) *The root as an absorbing and hold-fast organ.*

a) Relations to soil, water, air, mechanical support, etc.
b) Demonstrations of absorption, geotropism, hydrotropism.
c) Structure of roots.
d) Absorption and grappling by plants without roots.

3. THE PLANT SOCIETIES.—This is a study of natural plant areas, such as forest, meadow, swamp, etc., and is very desirable if practicable. It is recognized that in city schools, and in those with very large classes, the study of natural areas can form no large part

of the formal training, but it may always be encouraged. The conditions of several plant societies, however, may be imitated in the schoolroom, and many of the adaptations of plants observed.

(1) *Water plants.*—An aquarium stocked with characteristic water forms, a collection of marine seaweeds, and some swamp plants are things to be obtained by any school. The structures of such plants should be contrasted with those of plants living under different conditions.

(2) *Drought plants.*—Characteristic drought plants can be cultivated, and also the effect of drought conditions upon ordinary plants can be noted. The various methods of regulating transpiration and of storing water should be observed.

(3) *Ordinary plants.*—To contrast the plants growing in genial conditions with those growing in water or drought conditions is a fruitful subject of observation.

SECOND COURSE

PLANT STRUCTURES.—Such a course needs no outline. Types representing each great plant group should be selected and the essential structures observed, unessential details being passed over. Naturally the structures will fall under two physiological heads, the nutritive and the reproductive. In the selection of types the following groups should be represented: algæ, fungi, lichens, liverworts, mosses, ferns, horsetails, club-mosses, conifers, monocotyledons, and dicotyledons.

In connection with this course it would be well to continue some work in plant physiology, a number of simple experiments being "set up" to illustrate the more important functions of the structure under observation.

Such a course also incidentally involves the fundamental classification of plants, which phase of the subject may be carried into greater detail in connection with the study of the monocotyledons and dicotyledons by teaching the use of the ordinary manuals of seed plants.

G. In connection with both of these courses your committee would call special attention to the great importance of drawing as a means of securing definite observation.

It is also the judgment of your committee that to obtain the best results the work, as herein outlined, should be done during the last two years of the secondary-school period.

BOTANICAL MEMBERS OF THE COMMITTEE OF FIVE REPRESENTING:

1. *New England Association of Colleges and Preparatory Schools:*
   PROFESSOR W. F. GANONG, Smith College, Northampton, Mass.
   MR. DAVID W. HOYT, English High School, Providence, R. I.

2. *Association of Colleges and Preparatory Schools of Middle States and Maryland:*
   PROFESSOR B. D. HALSTED, Rutgers College, New Brunswick, N. J.
   MR. FRANK OWEN PAYNE, High School, Glen Cove, N. Y.

3. *North Central Association of Colleges and Secondary Schools:*
   PROFESSOR CHARLES R. BARNES, University of Chicago, Chicago, Ill.
   MR. E. R. BOYER, High School, Chicago, Ill. (Who has not indicated his assent to this report.)

4. *Southern Association of Colleges:*
   PROFESSOR ALBERT H. TUTTLE, University of Virginia, Charlottesville, Va.
   MR. ALBERT RUTH, High School, Knoxville, Tenn.

5. *A. A. A. S.:*

PROFESSOR CHARLES E. BESSEY, University of Nebraska, Lincoln, Neb. (See dissenting opinion.)

MR. J. Y. BERGEN, JR., High School, Boston, Mass.

6. *National Educational Association:*

PROFESSOR JOHN M. COULTER, University of Chicago, Chicago, Ill., *chairman.*

MR. I. N. MITCHELL, State Normal School, Milwaukee, Wis.

DISSENTING COMMENTS OF CHARLES E. BESSEY

While cordially agreeing with the majority of the committee in the general spirit of the foregoing report, and in many of its propositions and recommendations, I cannot subscribe to it in its present form. The essential points in which I dissent are as follows:

I cannot agree to say, with the majority of the committee, that the compound microscope "is a difficult piece of apparatus for the young student to use intelligently," since I have known of its very successful use in the fourth, fifth, and sixth grades of certain public schools in Nebraska. For pupils in the eleventh and twelfth grades (third and fourth years of the high school, where alone botany should be first taken up) the compound microscope is not as difficult to handle as the chemical and physical apparatus necessarily handled in a good high-school course in chemistry and physics. We are not called upon to make botany a simpler science than chemistry and physics in the secondary schools.

I must dissent emphatically from the proposition that "the first contact [of the pupil] should be with plants in their general relations, forming the natural covering of the earth's surface, and holding definite relations to their environment." This refers to the newest department of modern botany, viz., ecology, which is just now, for the first time, finding its way into the botanical courses of our foremost universities. We who have to deal with advanced students, well prepared in general and systematic botany, find it hard enough work to study the general relations of plants referred to above, and I hold it to be impossible to take up this work successfully in the secondary schools without a much better preparathan than suggested in the report of the committee.

I must dissent from much of the detail in the suggested course for the first half-year. Instead of attempting the impossible task of teaching the pupil in a few exercises "to recognize, in a general way, algæ, fungi, liverworts, mosses, ferns, equisetums, club-mosses, gymnosperms, monocotyledons, and dicotyledons," it will be far better to devote the half-year to this work, giving the pupil the opportunity of becoming personally acquainted with enough kinds under each head given above to enable him to recognize them in something more than "a general way."

As to the "life-relations and -processes" I dissent from the prominence which the report gives them thus early in the course in botany. Many

of the suggestions are useful, e. g., those pertaining to the position, form, and mutual relations of leaves; the stems bearing foliage leaves; prostrate, climbing, and erect stems; relations of roots to soil, water, air, etc.; and some of the experiments and demonstrations are suggestive; but others, again, are impossible of performance in any but the loosest way by secondary-school pupils, e. g., the demonstration of photosynthesis, respiration, and movements of water and elaborated material.

The inclusion by the committee of the study of "plant societies" in the suggested work of the secondary-school pupils is, to say the least, untimely. The pupils with no further preparation than that allowed by the committee are not able to designate the members of the plant societies, and, on account of the newness of this department of botany in America, there are practically no teachers in the secondary schools who are able to give any instruction in it.

I recommend that the committee's "second course" be more fully elaborated, and suggested to the secondary schools as the outline of work to be followed.

CHARLES E. BESSEY.

REPORT OF THE COMMITTEE ON ZOÖLOGY

The committee takes it for granted that, in accordance with the general report of the Committee of Ten, published some time ago, the subject will be awarded a place in the curriculum, and hence the present report covers its position, the character of the course, and extent of the same.

POSITION IN CURRICULUM

Studies on living things appeal more strongly to students of fifteen than to those of seventeen years of age, whereas the reverse is true of precise formal argument. The power of exact reasoning cannot be said to develop early, and the less formal methods of biological science are also transitional to those of both physics and chemistry. Furthermore, the mathematical training necessary for physics particularly is not obtained by the pupil, under present programs in secondary schools, early enough to allow the introduction of work in physics before the third year of the secondary course; hence your subcommittee is all but unanimous in recommending that, since work in zoölogy does not require the rigid training necessary for more formal work in physics and chemistry, it should precede work in these branches. It should, however, be preceded, in its opinion, by a year in general science and physiography.

Whether illustrated by the study of plants or animals, the phenomena of life are so similar and so clearly complementary that a rational arrangement of courses calls for a study of botany and zoölogy in successive

terms or years. Various circumstances may determine in the individual case the order to be followed, yet neither should be studied at the expense of the other, but both receive a due share of attention.

CHARACTER OF THE COURSE

1. Probably the most general method of teaching zoölogy in secondary schools at present is the text-book method. A large amount of information *about* animals is acquired thereby in a limited time, and the minimum of attainment and preparation is demanded of the teacher. Your Subcommittee on Zoölogy is unanimously opposed to this method, for not only is undue emphasis laid on the larger forms of animal life, but also no course has any right to be regarded as a course in science unless it include laboratory work.

2. The systematic method involves the detailed study of a group or groups in the most careful manner from a taxonomic standpoint. This plan has the advantage of bringing the pupils in contact with the objects studied, and trains powers of discrimination and analysis, but it gives the student an exaggerated idea of the importance of certain structural parts and of limited animal groups, and fails to develop general biological ideas.

3. The laboratory study of a series of animals is the method now used with the greatest success. Two tendencies are observed here: (*a*) the rapid superficial examination of a large number of forms, and (*b*) the more accurate study of a limited series of types. Your subcommittee is of the opinion that the thoro, careful study of a few types, emphasizing the quality of the work rather than the amount of ground covered, should be recommended as yielding the best results, tho "the course should not be exhaustive to the extent of becoming exhausting." In content some change in the prevalent character of zoölogical courses seems desirable. The systematic and morphologic work of colleges is not most profitable to the student; minute anatomy is clearly out of place, and exclusive dissecting is too time-consuming. External morphology, life-histories, habits, economic interests, are of far greater interest and value to the pupil, and all members of the subcommittee are united in emphasizing the necessity of paying greater attention to observations on the living animal and its activities.

A series of types can be selected on which it is possible to work without the use of a compound microscope, thus adapting the course to schools having a minimum equipment. The course may, however, be somewhat improved by the addition of a little work on lower forms by the aid of that instrument. The types may be selected with reference to the material available for use, but always with regard to preserving the balance of the course in getting some idea of the wide variation in animal structure, and should be so arranged that related forms come in succession.

It is essential that the student find individually the answers to questions from the objects before him, record independently his observations in the form of notes, and especially of drawings portraying the essential features with accuracy, and should himself conduct experiments of a harmless and simple character on the living animal. The definite information gained in this way and by comparison with other types should be broadened by reading and class instruction on allied topics outlined by the teacher. Of fundamental importance are field excursions for the study as far as practicable, of organisms in their natural environment, to collect and compare other forms, to observe and record their habits and activities. For the comparison of types not native to a given region a school museum is desirable, but it should be a small working collection and be put to constant use. The collateral reading of the course should be broad enough to include, not only work of immediate bearing on the topic in hand, but also the records of great naturalists and explorers, which will add to the interest as well as encourage love for nature.

EXTENT OF THE COURSE

Not less than one year of continuous work should be given to biological science, and half of the time should be devoted to zoölogy. Of the five hours per week spent in the study, two may be used for class-room work and three in the laboratory; altho, by virtue of lack of outside preparation for laboratory work, some think that double time should be devoted to it for a given credit. The choice of type forms used in the laboratory is subject to individual variation, but should not exceed ten for a half year's work. The line of study to be followed for each form is indicated by the following analysis:

1. External anatomy: (*a*) general form and symmetry, regions, parts; (*b*) comparison with other individuals of the same species, emphasizing points of variation and constancy; (*c*) comparison with other types.

2. Observations on the living animal, simple physiological tests, emphasizing care with regard to the inferences drawn from the reactions.

3. Class topics, including talks by the teacher, selected readings, class work, analysis of results.

As a specific instance of the application to the individual form, the following instance is taken from the report of one member of the committee:

BUTTERFLY

Any one of various species whose larvæ can be obtained alive near the end of September may be employed. The cabbage butterfly (Pieris), the milkweed butterfly (Danais), or the swallow-tail butterfly (Papilio) will meet these conditions.

DRAWINGS

1. Imago: dorsal view, wings expanded. X, 1 or 2.

2. Imago: left side, wings closed. (The bodies in 1 and 2 are to be drawn parallel to each other). X, 1 or 2.

3. Imago: front of head. X, 10.
4. Pupa: left side.
5. Full-grown larva: dorsal view.
6. Full-grown larva: left side.

QUESTIONS ON EXTERNAL ANATOMY

1. How many segments behind the head in (*a*) the imago; (*b*) the larva; (*c*) the pupa?
2. What external organs of the imago can be identified in the pupa?
3. Which feet of the larva correspond with those of the imago?

OBSERVATIONS ON THE LIVING LARVA

Each student (or group of students) should be provided with a glass vessel covered with netting and containing food leaves, for keeping the larva during pupation.

1. How is locomotion effected? Illustrate by diagrams.
2. How does the larva feed? Observe and record the movements of the mouthparts and of the head during feeding. Draw the outline of a partly eaten leaf.
3. (This observation must extend thru several days.) Make and record observations upon the act of pupation.

TOPICS FOR THE TEACHER

(1) The habits and food of butterflies. (2) The number of broods of butterflies during a single season and seasonal dimorphism. (3) Protective resemblance and mimicry. (4) The larger divisions and commoner native forms of lepidoptera. (Examples of lepidoptera illustrating the commoner native types should be shown, and students encouraged to collect and classify them.) (5) The hymenoptera; their structure, classification, and habits.

ZOÖLOGICAL SUBCOMMITTEE OF THE COMMITTEE OF SIXTY, NATIONAL EDUCATIONAL ASSOCIATION

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PHYSICS

The Committee on Physics of the Science Department of the National Educational Association did not submit a regular report signed by the members of the committee. These were:

Professor E. H. Hall, Harvard University, *chairman*.
Professor H. S. Carhart, University of Michigan, Ann Arbor.
R. B. Fulton, Chancellor, University of Mississippi.
C. L. Harrington, Sachs' Collegiate Institute, New York, N. Y.
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The basis of a report, suggested by Professor Hall, and consisting of a list of laboratory experiments, is given below. Comments by the members of the committee, in case they dissented from any part of this, were to be sent at once to the chairman of the Committee on College-Entrance Requirements. It may be assumed that the list met with the approval of those who did not so indicate dissent. Such comments as have been received are given after Professor Hall's statement.

OUTLINE OF LABORATORY WORK IN PHYSICS FOR SECONDARY SCHOOLS

At least thirty-five exercises, selected from a list of sixty or more, not very different from the list given below. In this list the divisions are mechanics (including hydrostatics), light, heat, sound, and electricity (with magnetism). At least ten of the exercises selected should be in mechanics. The exercises in sound may be omitted altogether; but each of the three remaining divisions should be represented by at least three exercises.

The division of the list into a first part and a second part is intended to facilitate and encourage beginning the study of physics very early in the school course. Most of the exercises in the first part have proved to be within the power of boys of fourteen or fifteen years, altho older pupils can do them more readily, as they can do all other work except tasks of pure memory. The cost of apparatus for the exercises of the first part is very small.

FIRST PART

PRELIMINARY EXERCISES

[Recommended, but not to be counted]

A. Measurement of a straight line.
B. Lines of the right triangle and the circle.
C. Area of an oblique parallelogram.
D. Volume of a rectangular body by displacement of water.

MECHANICS AND HYDROSTATICS

1. Weight of unit volume of a substance.
2. Lifting effect of water upon a body entirely immersed in it.
3. Specific gravity of a solid body that will sink in water.
4. Specific gravity of a block of wood by use of a sinker.
5. Weight of water displaced by a floating body.
6. Specific gravity by flotation method.
7. Specific gravity of a liquid: two methods.
8. The straight lever: first class.
9. Center of gravity and weight of a lever.
10. Levers of the second and third classes.
11. Force exerted at the fulcrum of a lever.
12. Errors of a spring balance.
13. Parallelogram of forces.
14. Friction between solid bodies (on a level).
15. Coefficient of friction (by sliding on incline).

LIGHT

16. Use of Rumford photometer.
17. Images in a plane mirror.
18. Images formed by a convex cylindrical mirror.
19. Images formed by a concave cylindrical mirror.
20. Index of refraction of glass.
21. Index of refraction of water.
22. Focal length of a converging lens.
23. Conjugate foci of a lens.
24. Shape and size of a real image formed by a lens.
25. Virtual image formed by a lens.

SECOND PART

MECHANICS

26. Breaking strength of a wire.
27. Comparison of wires in breaking tests.
28. Elasticity: stretching.
29. Elasticity: bending; effect of varying loads.
30. Elasticity: bending; effect of varying dimensions.
31. Elasticity: twisting.
32. Specific gravity of a liquid by balancing columns.
33. Compressibility of air: Boyle's law.
34. Density of air.
35. Four forces at right angles in one plane.
36. Comparison of masses by acceleration test.
37. Action and reaction: elastic collision.
38. Elastic collision continued: inelastic collision.

HEAT

39. Testing a mercury thermometer.
40. Linear expansion of a solid.
41. Increase of pressure of a gas heated at constant volume.
42. Increase of volume of a gas heated at constant pressure.
43. Specific heat of a solid.
44. Latent heat of melting.
45. Determination of the dew-point.
46. Latent heat of vaporization.

SOUND

47. Velocity of sound in open air.
48. Wave-length of sound.
49. Number of vibrations of a tuning-fork.

ELECTRICITY AND MAGNETISM

50. Lines of force near a bar magnet.
51. Study of a single-fluid galvanic cell.
52. Study of a two-fluid galvanic cell.
53. Lines of force about a galvanoscope.
54. Resistance of wires by substitution: various lengths.
55. Resistance of wires by substitution: cross-section and multiple arc.
56. Resistance by Wheatstone's bridge: specific resistance of copper.
57. Temperature coefficient of resistance in copper.
58. Battery resistance.
59. Putting together the parts of a telegraph key and sounder.
60. Putting together the parts of a small motor.
61. Putting together the parts of a small dynamo.

Professor Carhart suggests forty experiments similar to these. Twenty-four of these coincide exactly in title with items in the above list. The following fourteen are new, but many of them are probably implied in the list of sixty-one:

The Jolly balance.
Laws of the pendulum.
Pressure.
Curve of magnetization.
Action of current on needle.
Fall of potential in conductor.
E. M. F. of cell.
The tangent galvanometer.
Velocity of sound in solids (Kundt).
Law of length for strings (sound).
Law of diameter for strings (sound).
Law of tension for strings (sound).
Law of reflection (light).
Measurement of angle of prism (light).

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DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 12, 1899

The Department of Higher Education was called to order in Temperance Temple at 3:15 P. M. by the president, Robert B. Fulton, chancellor of the University of Mississippi.

In the absence of the permanent secretary, Oscar J. Craig, president of the University of Montana, was appointed secretary *pro tempore*.

After stating that those who were to present papers were absent, the chair requested President David Starr Jordan of Leland Stanford Jr. University to open the discussion of the topic, "The Practicability of a National University." President Jordan was followed in the discussion by President James H. Baker of the University of Colorado, and Dr. Nicholas Murray Butler, of Columbia University, New York city.

At the close of the discussion announcements were made of the future meetings of the department, and the meeting was adjourned until July 13 at 3 P. M.

SECOND SESSION.—THURSDAY, JULY 13

JOINT SESSION WITH SECONDARY DEPARTMENT

(For minutes of this session see minutes of Secondary Department.)

THIRD SESSION.—FRIDAY, JULY 14

The department was called to order at 3 P. M. by President Fulton.

The first exercise was a paper on "Continuous University Sessions" by President Jerome H. Raymond of the West Virginia University.

President Raymond's paper was discussed by President White of the University of Southern California, President F. W. Sanders of the College of Agriculture and Mechanic Arts of New Mexico, President David Starr Jordan of Leland Stanford Jr. University, and others.

Dr. Elmer E. Brown, of the University of California, followed with a paper on "The Study of Education in the University."

The Committee on Nominations reported the following:

For *President*—Jerome H. Raymond, Morgantown, W. Va.
For *Vice-President*—William F. King, Mt. Vernon, Ia.
For *Secretary*—Oscar J. Craig, Missoula, Mont.

The report was unanimously adopted, and the nominees declared elected as officers of the department for the ensuing year.

The department then adjourned.

OSCAR J. CRAIG,
Secretary pro tempore.

PAPERS AND DISCUSSIONS

CONTINUOUS UNIVERSITY SESSIONS

BY PRESIDENT JEROME H. RAYMOND, WEST VIRGINIA UNIVERSITY

At a gathering like this one—a gathering made up of men and women from every state and territory in our nation—one is forcibly impressed with the fact that it is impossible to separate ourselves one from another; for in this age of progress and of invention, the ends of the earth are gathered together with as much ease as a lady folds together the corners of her dainty handkerchief. Mountains are leveled, and plains and valleys meet together. Thought touches thought. One city shouts aloud to another city, and ocean cables, fathoms deep, bear the greetings of distant lands to us. The chain that binds the human race together is growing firmer. All that is thought out in the solitude of the scholar's study thunders or sings in the ears of the thronging multitudes of the city, or of him who paces alone by the seashore. This truth gleams thru every phase of human life, and from every field of the world's work. A great word is spoken today—a great, significant word on religion, on politics, on education. Tomorrow all men will repeat that word with joy, and all minds and souls be the richer for that message.

In no field of work is the interdependence of society truer than in the educational world. Whenever some teacher, be he famous or known only to the few who receive the bread of life from his hands, thinks out that which, put into action, shall add dignity and worth to life, which will make knowledge increase among men, which will bring into the mind and heart the voices of goodness and of beauty, do not the North and the South, the East and the West cry: "We, too, shall have this gift"?

The educational world is alive, in these days, to every suggestion which shall assist in solving the vexed problems of life: How shall we get better returns in brain and soul for the time and money and thought expended? or, How shall we create in lives indifferent to the marvels of knowledge a great hunger and thirst for the higher things of life?

Today I shall briefly review *one* means of bringing a college education to the reach of a far greater number of people than have heretofore been able to secure it. It is an innovation in university life. As yet it is, in the eyes of many, merely an experiment. Yet it will gradually but surely force itself into our educational system, for its advantages are so

many and so obvious that even the proverbial conservatism of our systems of education cannot permanently hold out against it.

The plan of continuous sessions is a part of a larger whole. It is one manifestation of the university-extension spirit — that spirit which, during the last eight or nine years, has been leading many of the more prominent universities of our country to widen their fields of activity with the purpose of bringing the advantages of the university to those classes of the population that have heretofore been deprived of university culture. This university-extension spirit led, in 1890, to the organization in Philadelphia of the American Society for the Extension of University Teaching. From Philadelphia the movement spread in all directions over our country. At first this university-extension spirit confined itself to the lecture field, sending university professors from their class-rooms out into the surrounding country to give more or less popular lectures to people who could not or would not come to the university. Most educators and the public generally continue to associate the term "university extension" with this particular form of popular education. But the university-extension spirit did not stop with furnishing popular scientific and literary lectures to the public. It has enlarged the scope of its activities, and has manifested itself in a number of new forms. Instruction by correspondence is one of these forms. Evening and Saturday classes for teachers and others is another. The summer quarter and continuous sessions of the university itself is a third form in which this spirit has manifested itself. I am not called upon to discuss the other manifestations of the university-extension spirit, but it ought to be understood that those institutions that have adopted the plan of continuous sessions have also adopted the other features of university extension. Indeed, the work of giving instruction by correspondence to those who cannot attend the university in person might almost be considered a necessary accompaniment of the plan of continuous sessions inaugurated by President Harper at the University of Chicago. In accordance with this plan of continuous sessions, while no student and no instructor is expected to work at the university more than nine months out of twelve, unless he so desires, the university itself is in continuous session thruout the year, there being no long summer vacation, but, instead, four short vacations, one week long, at the expiration of every period of twelve weeks. Each of these periods of twelve weeks is appropriately termed a "quarter." Under this system a student may begin his work at the beginning of any quarter, and may take a vacation either in the summer quarter or in the autumn, winter, or spring quarter; but he is at liberty to continue university work during all four quarters, if he is strong enough and desires to do so. Similarly, an instructor may arrange to take his vacation in any quarter of the year, provided not more than one-fourth of the instructors elect to take their vacations at the same time. Indeed, more than a fourth of the regular

staff may well be absent during the summer quarter, if the university be able and willing to spend a little money for outside help; for in the summer it is easy to get able instructors from other institutions for comparatively low fees. The courses are so arranged that the work of each quarter is complete in itself, and courses for which there is great demand are given more than once in the same year, so that any student in attendance during that year may have the opportunity of taking them, in whatever quarter he takes his vacation. This is a most important adjunct of the system. I believe there is now no difference of opinion in our faculty as to the desirability of having subjects in the university begin at the beginning of a quarter and complete during that quarter. Until this past year we have followed the old plan of having students pursue a good many subjects two or three hours a week each, continuing the study of each subject thruout the year. In this case students who do not enter at the opening of the fall term are unable to take up the work to any advantage when they do enter. Having adopted the four-quarter plan, we found it eminently desirable to concentrate the work of the student during each quarter on fewer subjects. With few exceptions, at present our classes all meet five times a week. In this way it is possible for us to complete many subjects or sections of subjects in one quarter, and thus our work in most subjects begins four times a year, and students who enter at the beginning of any quarter find classes which they may enter without the disadvantage of making up back work, always so exceedingly unsatisfactory to students and teachers alike.

So much for the system itself. Its advantages are:

First, it enables us to meet, far better than they have ever been met before, the needs of that noble body of young men and women who work their way thru college—a body that would be much larger than it is if the conditions were more favorable to them. This body is a large one in West Virginia, but we are painfully conscious that many of the most deserving men and women of the state are kept out of college altogether, or until late in life, or are compelled to spend a great many years in completing their course, because they cannot so arrange their bread-winning work as to make it fit in with a college course. Many of these young men and women are teaching school during the winter months, and thus lose from one- to two-thirds of each university year. And not infrequently the school term begins and ends at such dates as to make it useless to undertake to get anything of value from the university during the few weeks in fall and spring that are left to them; in such cases, altho their teaching takes hardly half a year of their time, they are cut off by it from all university privileges. This state of affairs ought not to exist, and it is quite unnecessary that it should exist. If a would-be student, in view of these difficulties, takes for granted that he cannot, with any advantage, teach and go to the university during any part of the

same year, and therefore plans to work steadily until he has saved enough to carry him thru one or more years of the university course, he may be unable to get remunerative employment during all the four quarters of the year, and thus again he will lose valuable time because he has not the chance he should have to study any quarter that he cannot work at money-making to advantage. Furthermore, it is obvious that it is a great advantage to a student who has saved enough to keep himself at school twelve months, to be able to attend college continuously for twelve months, instead of having to content himself with nine, because college is not in session during the summer. Now that a young man or woman may attend the university during any quarter of the year, it is safe to say that the university will serve an immensely larger body than it has served in the past, and, moreover, that many of those whom it has heretofore served after a fashion will be able to graduate anywhere from one to six or eight years earlier than they could otherwise arrange to do.

But not only is there this great advantage to the regular student who, for economic or other reasons, may wish to take his university vacation at other times than in the summer; there is to be considered, in the second place, the advantages to the professional teacher and others who, without the summer session that is an incident of the four-quarter system, could get no direct advantage from the existence of the university. For the benefit of this class of students the summer quarter is divided into two terms of six weeks each, so that some short courses may be given which will enable the attendants to get valuable assistance from the university, either in the form of general culture, or in the form of special instruction and training to make their regular work more effective, without giving up their whole vacation. There are also, however, regular twelve-weeks' courses such as are given during the other quarters.

Let it be noted that a regular university session in the summer quarter, having in attendance a considerable number of regular university students, is very different from, and much superior to, a mere summer school. At least one teacher of pedagogy will always be on duty during the summer quarter, to conduct classes and lead round tables for the benefit of the teachers; and distinguished educators from other parts of the country are secured to give courses six weeks or twelve weeks in length. While it will always be desirable to have the department of pedagogy represented during the summer quarter, it will not be necessary to have all the other departments and subdepartments of instruction represented in the summer or any other quarter. One year the professor of geology, for instance, may be present in the summer quarter, and take his vacation in the spring or winter or fall; the next year he may take his vacation in the summer, and the professor of zoölogy be present that quarter; and so on. The four-quarter system, therefore, need not necessarily be confined to universities that have great resources. While it is desirable, of course, to

have all departments in operation every quarter, this is not an absolute necessity; and in the case of institutions that have not the financial means to add one-third to their annual expenditure, the summer quarter may still be adopted, and by proper arrangement of classes the continuous-session plan will at least double their usefulness, while increasing their expenditure very little or not at all.

A third advantage of the system is one that has, perhaps, already suggested itself, namely, that the effectiveness of our instructors' work will be materially increased by enabling them to take vacations when other universities are in session, so that they may learn at first hand what is being done in other institutions, and may see at work and learn from the masters in their respective specialties. It will be possible, under this system, for an instructor to teach for six or nine quarters successively, and thus earn a vacation of six or nine months on full salary, which will enable him, without financial sacrifice, to spend a year abroad in study if he desires to do so—a privilege of which many of our professors are already planning to avail themselves. The result of this will be to keep our teaching force up with the times, and prevent the fossilization of our professors. Great as are the advantages of the four-quarter system to the students, the professors have even more reason to appreciate it.

I have not spoken of the possibility the four-quarter session will afford to the very strong and ambitious student of completing his university course in less than the regular four years, because I feel that such intense and unremitting application is not good for the average student; but, of course, there are cases in which such a course will be justifiable, and a great benefit to the student.

And now let me add one word in regard to the business and financial aspect of the matter. What business-man would build and equip an extensive plant, for manufacturing or other business purposes, in which his own personal interests were concerned, and then regularly allow it to lie idle during three months out of every twelve? What railroad president would advocate closing the stations, and stopping the service, for a long vacation of three months each year? None, I am sure. Shall we, then, be less zealous to make the greatest possible use of the great educational plants, whose care and conduct have been committed to our charge, than we would be of our own personal business interests?

On the whole, it seems to me that there is everything to be said in favor of this admirable invention of President Harper, and nothing of consequence to be said against it.

It is a source of great satisfaction to me to be able to say that thus far the system has worked admirably at West Virginia University. Let me come down to actual facts and actual experience, and give you the real data of our first summer quarter, which began July 1, 1898.

At the outset we were able to secure a number of lecturers of note,

among whom were President E. Benjamin Andrews, now superintendent of the public schools of Chicago; Dr. Nathaniel Butler, president of Colby College, Waterville, Me.; Dr. Lester F. Ward, of the Smithsonian Institution, Washington, D. C.; Miss Jane Addams, founder and head resident of Hull-House, Chicago; Professor B. A. Hinsdale, of the University of Michigan, and a number of others, who gave to us their best and choicest gathered thru years of untiring labor. We made the program of courses for our summer quarter rich and varied, the evening lectures, which were opened to the public, becoming the central attraction of our little university city.

Notwithstanding the fact that it was the first summer quarter, the number of students in attendance was 190, representing thirteen states, viz.: West Virginia, Georgia, Florida, Texas, Tennessee, Pennsylvania, New York, Maryland, Wisconsin, Washington, Illinois, Colorado, and the District of Columbia. Thirty-one of the fifty-five counties in West Virginia were represented.

The students were classified as follows: graduate students, 18; seniors, 10; juniors, 12; sophomores, 16; freshmen, 20; law, 22; engineering, 10; special, 43; pre-medical, 4; art, 8; commercial, 8; music, 5; preparatory, 23.

The graduate students were graduates of the following institutions: West Virginia University, 13; Yale University, 1; Bethany College, 1; Hampden-Sidney, 1; University of Washington, 1; Allegheny College, 1.

Among the students were three college professors — two from Bethany College and one from St. John's College, Maryland.

Ten teachers in the West Virginia state normal schools attended, and a goodly number of city superintendents and high-school principals.

In addition to the 190 enrolled students, a large number, including normal-school principals, clergymen, teachers, and others, attended some of the courses of public lectures, but did not matriculate.

Our second summer quarter began the first day of this month, with an attendance much greater than last summer, showing that the opportunities for summer study are appreciated by an increasing number of people in our locality.

On July 12, last year, 164 students had enrolled. On that day this year, as I am advised by telegram, 230 students had enrolled — an increase over last year of sixty-six students, or a little more than 40 per cent. Of the 230 students, seventy-one are women. Thirty-six of the fifty-five counties of West Virginia are represented this year, as compared with thirty-one last year, showing that the influence of the university is gradually extending thru the agency of the summer quarter. Twelve states are represented by students in the summer quarter, indicating that, if students cannot get work during the summer at universities in their own states, they will come where they can get such opportunities. And

it is worth noting that students who come to a university for summer study are apt to stay there for study during the remainder of the year, if they can get what they want. This consideration will, perhaps, be more influential than any other in persuading state universities to adopt the four-quarter system.

According to our homely proverb, the proof of the pudding is in the eating. In this matter of the desirability of maintaining a summer quarter as one of the regular sessions of the university, the real argument to be considered is the attitude toward the summer quarter of the students who attend it. And here I come to one additional advantage of the four-quarter system, which I have thus far omitted to mention. I refer to the enthusiasm which was manifested thruout the entire body of students who attended during the summer last year. I question if our university has ever manifested so much enthusiasm over any new line of policy as has been manifested in regard to the summer quarter. This enthusiasm has resulted in a very much larger attendance during fall, winter, and spring. Notwithstanding a very great increase in our entrance requirements, our total attendance of resident students this past year was 815, as compared with 644 the year before, an increase of 171, or more than 26 per cent.; and we attribute this increase, in no small degree, to the enthusiasm aroused by the summer quarter. This enthusiasm has been manifested, not only in our regular student body, but also in the body of teachers in the secondary schools thruout the state, whose interest in the university has been quickened by their attendance during the summer, and who went to their homes, at the close of the summer quarter, filled with a desire to induce as many as possible of their friends to attend the university. I consider this to be by no means the least of the advantages accruing from the establishment of the four-quarter system.

The benefits accruing to the students in attendance on the summer quarter group themselves clearly along certain lines:

1. The summer quarter gave many the opportunity of making up work in which they were behind, thus enabling them to graduate sooner, or at least to be regularly classified.

2. For those teachers who were "working their way thru college" the summer quarter was a priceless boon. Teachers working for seven, eight, or nine months in the year were able to devote their summer to study without losing their salaries.

3. The public lectures were of especial value to the student body as a whole, giving a good general idea of subjects of which they had had but little previous knowledge. The whole field of various subjects was attractively presented, and it was noticeable that very many students attended regularly all the public lectures, eager to get at least some glimpses into the world of sociology, or literature, or the sciences, or the languages.

4. The professional teacher gained new zeal and inspiration, coming, as he or she did, into contact with other teachers from all over the state, and from other states as well. We had with us as students college professors, superintendents of schools, normal-school teachers, besides teachers from all grades in the city and rural schools. And all witnessed to the strength given by the summer session.

5. The social education gained by attendance on the summer quarter was not the least of the benefits gained. I mean the pleasant friendships that were formed, the interchange of ideas between those teaching under diverse conditions, the leisure to *grow* often denied during the year crowded with the duties attendant upon teaching.

And now, in closing, let me ask you, my fellow-teachers: Is there any industry of which there is more constant need than the industry of education? Are we not unworthy of our high calling if we neglect to do everything in our power to multiply in every possible way the forces that are struggling for the enlightenment of humanity? In all seriousness I say: Let us close our factories and workshops three months out of every twelve if we must; let us stop our railroads and steamships for one-fourth of the year; but let us keep open the year round, day and night, in good weather and in bad, in summer and in winter, every library and every museum, every laboratory, every college, every university. Let us rest sometimes from the work of increasing our material goods and chattels, but in the name of all that is good, all that is true, all that is beautiful, let us see to it that the work of "increasing and diffusing knowledge among men" shall never rest. You and I need rest sometimes; but the buildings, libraries, museums, laboratories, and apparatus in our various universities do not need rest. While you and I are resting, why should we insist on others being idle who feel like working? "Men may come and men may go," but the real university should go on forever.

In the old time, when universities were first established, higher education was for the aristocratic few; today we profess that it is for the many; yet we cling tenaciously to the mediæval superstition that all intellectual effort must cease during the summer. The heavy hand of the dead past still crushes down, in many places, every attempt at educational development. Prejudice still sits in "the seats of the mighty," and rules with iron severity even in our universities, where reason is supposed to hold sway. But a new day is dawning, and most of us in this room will live to see the time when it will be generally conceded that to close a university during the summer is a foolish, if not a criminal, waste of material resources and of life.

DISCUSSION

PRESIDENT G. W. WHITE of the University of Southern California believed that continuous sessions would be wise, not only in the college, but in the public schools also. He was inclined to believe that all of the university work should be carried on, and not merely a part of it. He believed also that it would afford an opportunity to finish work that was incomplete. The chief objection would be the difficulty of getting faculties to adjust themselves to this arrangement.

PRESIDENT F. W. SANDERS of the College of Agriculture and Mechanic Arts of New Mexico stated that he was fully in accord with the paper. Continuous sessions do not necessarily prevent vacations. If so, he would oppose the proposition. He had no opinion regarding the application to public schools, altho the Chicago experiment appears to be a success. He thought it would be well to give a part of the work; for instance, German one quarter and French the next. In the matter of getting faculties to work in line with the new arrangement he thought there would be no difficulty when the state of the case was fully understood.

PRESIDENT DAVID STARR JORDAN said that the system had not been adopted in Stanford University, but not because of any opposition. He did not regard it as a wise plan to continue the service of the professors twelve months in the year.

PRESIDENT JOSEPH SWAIN, of Indiana, said that he believed that the plan would be adopted in some form or other in all state universities. The University of Indiana has planned a half session for next summer. Some localities may be unfavorable for this kind of work.

PRESIDENT SAMUEL T. BLACK, of California, asked: "What arrangements are made for graduating exercises?" The answer was: "Let these be at the close of each quarter." "What will be the effect on tuition fees?" was next asked. The answer was: "The summer quarter will bring in fees in accordance with the number of students."

PRESIDENT WHITE thought that continuous sessions was the coming plan for all colleges and universities, altho he looked upon it with some regret. It will break up class associations and decrease university spirit.

PRESIDENT RAYMOND, in answer to a question regarding expense, stated that for last summer's quarter he asked $1,500 and expended about $750. For this year the legislature had appropriated $3,000. Matriculation fees would bring in the most of the money. The professors in the University of West Virginia will yet receive their vacation. It is difficult to get the professors to take vacations even in summer time. He stated that the summer students were the best students. Students are not encouraged to finish a college course in three years. The summer work has been better than that in the other sessions. Classes meet but once per day in any one subject. Advanced students get just as much from the summer work as from that of any other season of the year. The buildings are pleasant, as also are the libraries, laboratories, and halls. There is no double set of professors needed. Departments have one assistant. The tendency will be to a moderate increase in the number of the faculty.

THE STUDY OF EDUCATION IN THE UNIVERSITY

BY PROFESSOR ELMER ELLSWORTH BROWN, UNIVERSITY OF CALIFORNIA

It is fair to presume that every profession properly so called will ultimately have its own university school of professional training. Education as a profession occupies, however, a peculiar position. For the university itself, including its professional schools, is an institution of education. When, therefore, the subject of education is pursued as a university study, we have the university looking at itself, as it were — becoming fully conscious of its own processes, as well as of the processes of other institutions in which its students may be preparing to teach. This fact, I think, explains a part, at least, of the current difficulty in the adjustment of university departments of education to the other university activities. Uncertainties and misunderstandings are unavoidable in making such adjustment. Yet there can be little doubt as to the ultimate outcome. In this paper I shall undertake to discuss only two aspects of the matter; and in this discussion shall attempt to show the importance of a university study of education as a whole, from the lowest grade to the highest, including the study of the university itself as the highest member of a complete system of schools.

The first aspect of the subject to which I would call your attention is the study of methodology.

University activity falls into two main lines, instruction and research. These two are intimately related to each other. It is generally agreed that a university instructor must engage in individual research, if his teaching is to have the freshness and vitality which university standards require. It may not be so generally agreed that the giving of instruction is of advantage to the one engaged in research; yet the best university men approach to unanimity in the view that these two lines should be associated together in university administration. Let us see wherein the connection between the two consists. From the standpoint of the investigator it may be said that discoveries are of no general significance until they have been announced to the world. Publication, then, is a necessary accompaniment of discovery, if the discovery is not to be hoarded up as a miserly possession of the discoverer; and oral instruction may be regarded as a part of the process of publication. By the presentation of his acquired knowledge to regular students the professor has abundant opportunity of correcting and improving his form of presentation, whether before or after the matter is put into print. From the standpoint of the instructor, the connection is still more intimate. Passing over other relationships which might be mentioned, we may dwell upon this fact,

that instruction, instead of having for its object the putting of the student in possession of certain knowledge, has to do with putting him in possession of methods by which he may acquire knowledge for himself. Independent research is related, then, to instruction as a sort of *terminus ad quem*.

It is worthy of remark that teaching varies greatly in the command of method which it imparts to the student. It may fairly be regarded as a fault when university instruction adds greatly to the student's stock of learning without carrying him forward at the same time to the mastery of higher methods of study. Almost any subject which presents a practically unlimited store of information is liable to this danger. It appears in the study of literature, of history, of modern languages, and in other subjects as well. Under a free elective system, students are found to choose many courses of a nearly uniform grade of advancement. They pile up erudition without a corresponding advancement in method. I suppose the significance of a group-elective system is found in the fact that under that system a student may be carried toward the goal of independent research, rather than in the mere fact that it gives acquaintance with a wide range of coherent knowledge. In the union of these two advantages the group-elective system is exceedingly valuable. It fails of attainment to its highest usefulness if the group is made up of courses approximately on a level as regards the methods of study which they involve. We see, then, that university instruction tends to admit the student, not only to a kind of participation in the professor's knowledge, but also a kind of participation in the professor's method; and so enables the student to advance for a longer or a shorter distance toward the mastery of methods by which he may attain to new knowledge — knowledge new not only to himself, but, finally, knowledge new to the world. The method of instruction of mature students, then, while it may not be carried on with any expectation of their becoming masters of research, must look forward to the methods of research as the norm to which it should approximate. This does not imply that the semblance of independent research is to be forced upon students at an early stage in their progress. It does not, in fact, prejudge at all the question as to where any sort of independent research is to begin. But I think it is clear that the method of instruction in all college classes must be judged according to its place in a progressive system of instruction, the highest term of which is represented by the free investigation of the real scholar.

As we go down thru the grades of instruction below the college, we find it necessarily a continuity of method thruout. To suppose otherwise would be to assume a break in the continuity of the forms of consciousness. Many changes there must be on the way from the primary school to the college; but these changes appear within a continuous system. The instruction in the primary grades is much more remote from the

research of the scholar than is that of the high school or college. Yet the instruction in the primary school as well must find its place and due relationship among the several parts of a complete system. Even the method of the lowest grades cannot be adequately judged without reference to the ultimate goal of the highest instruction.

In the system of instruction, as in every true system, there is unity in variety. We may at one time lay stress upon the essential unity of method in all grades of school; at another time we may emphasize the differences between the several grades. But we do not attain to a complete theory of instruction unless we take full account of both the unity and the variety. We cannot fully understand any part save in its relation to the other parts and to the whole.

In a comprehensive survey of teaching methods, as we have seen, the instruction in each grade appears as part of a progressive movement toward putting the learner in full possession of the power of discovering new truth. This one universal trend of instruction we find modified in two principal ways: first, the particular method followed at any stage of instruction is conditioned by the knowledge of the subject in hand and of related subjects which the pupil is found to possess; secondly, it is conditioned by physiological peculiarities of the age to which the pupil has attained, and by the tendencies in mind and disposition which are bound up with those peculiarities. We may say, in a word, that the universal method of instruction must at any given stage be adapted to the degree of maturity which the pupils have attained; but that maturity may be regarded with reference to mental conditions which are peculiarly dependent on bodily development, or it may take account simply of acquisitions in knowledge and the intellectual advancement which is indicated by those acquisitions. Both of these elements of variation must be considered in solving the problem of method in any given grade; and then there must also be taken into account the immense range of differences between individual pupils, and the very important differences between the several subjects of instruction. If we add to this the variations which the individual teacher's peculiarities bring into the case, it will appear that the differences which a study of method must touch upon are sufficiently numerous and bewildering. It would be pedantically trivial to undertake the mapping out of these things down to minutiæ. It would be equally unscientific to adopt a general form of instruction and take no account of obvious variations. A university view of the theory of education seems to demand a clear recognition of unifying principles, coupled with a sufficiently complete account of the elements of difference to serve the broad purposes of professional training.

One or two special considerations may be added. The ever-present danger in the practice of teaching is that of continuing to give instruction by one grade of method when the pupil is ready to advance to a higher

stage. This is, perhaps, the chief danger in our grammar schools. The shortening and enriching of the grammar-school course, of which we have heard much of late, means this, for one thing, that pupils shall not continue to be occupied with new information merely, when they are ready for an advance in method. This is a danger which the grammar school shares with the last years of the college course. Abrupt changes of method are obviously harmful. So it is necessary to the most effective instruction that the teacher should be familiar with the methods of grades lower and higher than his own. Even for the college instructor it is desirable that the methods in actual use should be seen in the light of a general theory of instruction.

So, I think, we may say that a complete view of instruction, from the lowest to the highest, is necessary to an adequate understanding of any stage of instruction. The professional training of teachers in a university should present this comprehensive view. The ideal of instruction in methodology, in the training of teachers at a university, may be put about as follows: It should include logic, both deductive and inductive; a general survey of instruction in the several grades of school; and, finally, a course in the methodology of some one of the ordinary school studies. The department with which I am directly connected has to do especially with the second of these enumerated elements, but I wish at this point to call your attention to the one last named.

The university-trained teacher needs to know the essential method of some one subject in its higher ranges. Such knowledge will help to secure a proper perspective in the study of earlier methods in the same subject. It will also serve to round out the understanding of method as a whole, which would be somewhat abstract and incomplete otherwise. I can best illustrate what I mean by referring to courses in two of the departments at the University of California. The head of the department of mathematics gives a course in the logic of mathematics, which is an introduction to the several types of method employed in algebra and geometry. The course is intended for seniors and graduate students, and rests upon a large prerequisite in the same department. Questions relating to instruction in mathematics, particularly in the high schools, are discussed in connection with this large view of the method of mathematical demonstration. In the department of English the associate professor of English philology conducts a seminar in method. This course concerns itself primarily with methods of advanced study in English. In connection with this higher view, the methods of instruction in the lower schools, and particularly in the high schools, are examined. In such courses the attempt is made, not to transform the methods in the lower schools according to the pattern of more advanced methods, but rather to see those more elementary methods in the light of the essential methodology of the subject, taking account of the necessary

differences from grade to grade. Such studies as these cannot fail to enlarge and clarify the views of prospective teachers, and contribute to a scholarly consideration of the whole problem of method in the schools.

The second aspect of the study of education in a university to which I would ask your attention is the study of educational organization and administration of public systems of schools. It is too commonly supposed that a university department of education has to do simply with methods of teaching. But this should not be the case. The teachers who go out from a university are not merely to be skilled instructors in an established order of schools. They will be looked to, as time goes on, for wise counsel as to improvements in the established order. Some will hold positions of influence as principals and superintendents. Those who remain in the ranks as teachers will be expected, not only to work under prescribed courses of study, but also to aid in the remodeling of courses. They will have to do in many ways, other than simply giving instruction, with the relation of the school to the higher interests of the community and of the state. Reforms of all sorts will be continually coming to the front, which will call for the co-operation of the teaching body. It is important that university-trained teachers should have some higher insight into the real nature of an educational system, which will enable them to further good movements and work against bad movements. So it is important that in the university they should learn to take a university view of the institutions of public education. And a university view, as I understand it, is one that takes account of all the parts, from the lowest to the highest, and sees them in their proper independence of function, and also in their due relation, one to another and to the whole.

Here again the university itself must be one chief object of study. The system of schools cannot be justly interpreted without large reference to its highest member. I would venture to add that that highest member cannot be fully understood without reference to the lower members and to the totality of which all are parts. With all of its internal differences, education is, after all, in all of its grades, one fairly compact interest of society. If any school, even the highest, sets itself off in any sort of artificial isolation from the rest, it thereby narrows its range of vital relationships, and to that extent distorts and weakens its influence upon our civilization. That was a luminous conception of the university which appeared in France in the latter half of the eighteenth century; a conception which embraced all educational interests of the state in one comprehensive view, and applied to the whole the name *university*. This new use of an old and familiar term is open to objection, to be sure; but the idea to which it gave a name was fruitful and magnificent.

Many influences are at work making and remaking our civilization. Some of these are subtle and intangible; some are personal, embodied in single, pre-eminent individuals; but others have taken institutional forms,

and in this guise fill a large place in the movement of human society. One of the most closely knit groups of institutions is that which embodies the direct efforts of society to maintain and perfect its civilization thru instruction and nearly related processes. To study the diversities of function within this group, in immediate connection with the unity of principle and purpose running thru all the members, would seem to be the surest preparation for a right understanding of the part which education in any of its grades has to play in modern life.

The interplay of institutions one upon another is a most fascinating subject of inquiry. The schools have entered into, now one relationship, now another, with other institutions, and these relationships are still progressively changing. In order to understand them, it is necessary to know the schools, as well as their institutional environment; and to know the schools, for this purpose, is to know them in their organic connection one with another.

Using the term "university" now in its more common signification, as denoting the highest type of school, we can see how its relation to our civilization is conditioned at all points by its relation to lower schools. Its students are prepared in the lower schools for admission to university courses. What the university can and shall do for them depends on what the lower schools have already done. This is the most obvious, but not the most important connection. The university graduate goes out to his life-work in a society made up largely of men and women whose formal education has been received in the lower schools. The message which he carries from the university is a message addressed to that constituency; and whether he makes the message effective or not depends, not simply on its intrinsic worth and his understanding of it, but also on its being a real message for that constituency. The scientific results of university researches are put forth in a commonwealth, the government of which is largely influenced, if not determined, by those who have been educated in the lower schools. Whether these results shall be welcomed and utilized for the common good depends partly upon the laws of the state and partly upon public opinion; and the kind of education given in the lower schools influences in a thousand ways both the laws and the public opinion which lies back of the laws. It follows that the part of university instruction in our modern life is not to be determined by studying the character of the university as of an institution by itself, but rather by viewing the university as a part of a more comprehensive institution, embracing the whole formal provision for public instruction.

And so of the high school, the elementary school, the kindergarten, the normal school, the school of technology, the school of commerce and of trades: to be really understood, each must be studied in relation to other institutions; and it must be seen that any particular school enters into this relation, not as an institution complete in itself, but as a member

of a greater institution — the educational system of the state. The students of education in a university are for the most part preparing to become teachers in secondary schools. A well-rounded institutional study of the secondary school is accordingly a highly important part of their professional training.

Such are two of the elements which seem to me to demand a place in the advanced professional training of teachers at a university. It may be added that these are proper studies for the university aside from any question of training for a profession. As the proper study of mankind is man, a proper study of universities is the university; and to study the university in university fashion is to study it not only in its particularity but also in its universality — not in its isolation only, but also in its integral relations. The university view of education, to be a true university view, must be a view of education in its wholeness.

DEPARTMENT OF NORMAL SCHOOLS

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 12, 1899

The Department of Normal Schools met in the chapel of the State Normal School, Los Angeles, at 3 P. M., with President Theodore B. Noss, of California, Pa., in the chair.

President E. T. Pierce of the Los Angeles State Normal School welcomed the department in a brief address.

The president of the department stated that the discussion at both sessions would be based upon the report of the Committee on Normal Schools, particularly that part of the report which relates to the training school.

The first topic discussed was "The Comparative Value of Student Teaching in Normal-School Work." This topic was suggested by the following statement in Thesis II of the report:

> In comparison with other lines of work in a normal school, practice teaching is capable of ranking as the most valuable course for the student.

The discussion was opened by Herman T. Lukens, head training teacher of the California (Pa.) State Normal School, and was continued by John W. Hall, head training teacher, State Normal School, Greeley, Colo.

Mrs. L. L. W. Wilson, head of the department of biology in the Philadelphia Normal School, led in the discussion of the second topic, viz., "The Relation of the Training School to Other Departments of the Normal School." This topic was suggested by the following statements in Thesis XXVIII of the report:

> The training school should be the correlating center of the normal school. . . . Heads of departments in the normal school should be supervisors in fact of their subjects in the training school. . . . Faculty meetings in a normal school should be directed, not merely to executive work, nor primarily to that, but to instruction.

"May a Training School be at the Same Time a Model School?" was the third topic under consideration. The proposition of the committee in Thesis XXV is as follows:

> The idea that a normal school should be provided with a training school and a model school besides is hardly a feasible one.

The principal address was made by W. E. Wilson, president of the State Normal School, Ellensburg, Wash.

A brief general discussion, participated in by Z. X. Snyder and others, followed, after which the following Committee on Nominations was announced by the chair:

Ossian H. Lang, of New York. C. M. Light, of New Mexico.
John W. Hall, of Colorado.

SECOND SESSION.—FRIDAY, JULY 14

The department met at 3 P. M.

The first subject under discussion was "Lesson Plans." The committee's report, Thesis XXIV, affirms:

> Until a high grade of independence and skill in planning and conducting recitations has been proved, a written plan of each recitation should be required by the critic teacher.

Miss Marion Brown, principal of the New Orleans Normal School, opened the discussion, and was followed by Ossian H. Lang, editor of the *New York School Journal.*

The next topic considered was "Observation as a Factor in Training-School Work," suggested by the following propositions in Theses XVI and XVII of the report as follows:

> Some observation should precede actual instruction. . . . This observation, however, is comparatively useless, unless it is supervised and discussed with the same care as the actual teaching of a student teacher.

The subject was discussed by Miss Gertrude Edmond, principal of the Normal Training School, Lowell, Mass., and C. C. Van Liew, head training teacher, State Normal School, Los Angeles, Cal.

Thesis X of the report suggested the last topic of the discussion, viz., "Qualifications of the Critic Teacher." The report makes the following affirmation:

> Next to a wholesome personality, the special feature of a critic teacher should be the ability to show particularly the merits, as well as the defects, of instruction, basing criticism plainly upon accepted principles of teaching.

The topic was discussed by Miss Harriet M. Scott, of Detroit, Mich., and Hon. N. C. Schaeffer, state superintendent of public instruction, Pennsylvania.

The Committee on Nominations recommended the election of the following officers for next year:

For *President*— James E. Russell, New York, N. Y.
For *Vice-President*— Miss N. Cropsey, Indianapolis, Ind.
For *Secretary*— Charles C. Van Liew, Chico, Cal.

It was moved and carried that the secretary of the department be instructed to cast the ballot of the department for the persons named. The ballot was cast, and the officers were declared elected.

The department then adjourned.

O. H. LANG,
Secretary pro tempore.

PAPERS AND DISCUSSIONS

REPORT OF THE COMMITTEE ON NORMAL SCHOOLS

INTRODUCTION

To the Normal School Department of the National Educational Association:

The undersigned members of the Normal-School Committee submit the following report:

I. ORIGIN AND HISTORY OF COMMITTEE

At the session of the National Educational Association held in Denver, 1895, the Normal Department passed the following resolution, offered by President Snyder, of Greeley, Colo.:

> *Resolved,* That a committee of five be appointed by the president of the department to meet during the year and formulate a report, to be presented at the next meeting, upon such educational topics as directly concern the department.

At the Buffalo meeting, 1896, the committee made a brief report upon such matters as appertained directly to the work of normal schools. The report was adopted and the

committee increased to eight, and instructed to make a printed preliminary report at the next meeting. This preliminary report was presented at the Milwaukee meeting. It was vigorously discussed. On motion of President A. R. Taylor, Kansas, the following resolution was adopted:

Resolved, That the report be accepted, and the committee continued, with instructions to continue the investigation on the lines proposed, and also to submit a course of study with minimum of professional requirements for the state normal schools of the United States.

The work of the committee was progressing very slowly, because no funds had been appropriated to meet expenses. President Boone, Ypsilanti, introduced a resolution asking the Board of Directors of the National Educational Association for an appropriation of five hundred dollars ($500) to meet the expenses of the committee in its investigations.

At this meeting the directors voted an appropriation of five hundred dollars ($500), subject to the discretion of the Executive Committee and the Board of Trustees. At the Chattanooga meeting of the Department of Superintendence the amount was granted. This was too late for the committee to report at the Washington meeting, except in a preliminary way. The committee met at Washington and arranged to make a final report at Los Angeles. The committee had its final meeting in Columbus, O., in February, 1899. It was in session six days, and agreed upon the following report as its findings.

II. WORK OF COMMITTEE

All of the topics studied have been printed in the proceedings of the National Educational Association from time to time. In the report will be found almost all the questions that have interested the normal-school men of the country. They may have lost the form in which they were originally put, but their substance will, upon examination, be found in the body of this report.

Since the Milwaukee meeting the members of the committee have made a study of the courses of study in operation in the normal schools in the various sections of the United States; as well as a continuance of investigation in other lines. President A. G. Boyden reported at the Washington meeting on the New England state normal schools; Miss Marion Brown, on the southern state normal schools; President Seerley, on those west of the Mississippi and east of the Rocky Mountains; President Boone, on the north central state normal schools; President Pierce, on the Pacific state normal schools; Dr. N. C. Schaeffer, on the middle state normal schools; Dr. Frank McMurry and President Snyder made a study during this time of the training school. The reports of these members, presented at Washington last year, were printed in the proceedings of the Washington meeting.

From all of the foregoing reports have been obtained the data from which this report has been formulated.

The work of the committee for the past year was distributed as follows: President Seerley, Iowa, was appointed a subcommittee to investigate and report on geographical and historical variations that exist among the normal schools of the United States; Dr. N. C. Schaeffer, Pennsylvania, was appointed a subcommittee to report on maintenance and control of normal schools; Dr. Frank McMurry, New York, was appointed to report on the training department of the normal schools; Miss Marion Brown, Louisiana, was appointed to report on the kindergarten as connected with the normal school; President Pierce, California, was appointed to report on reciprocal recognition of diplomas; President Snyder, Colorado, made a study of the effect of normal schools upon public education.

Differences of opinion have existed on many questions; but, by concessions upon the part of all the members of the committee, they have been able to agree upon the report as presented.

The committee fully appreciates how difficult it is to set forth, with any degree of definiteness, a report that will meet the approbation of all educational people.

Thanking the educational people of the country and the officers of the National Educational Association for their courtesy and material assistance, the committee respectfully submits the report.

Z. X. SNYDER, Colorado, *Chairman.*
R. G. BOONE, Michigan.
A. G. BOYDEN, Massachusetts.
MISS MARION BROWN, Louisiana.
FRANK MCMURRY, New York.
E. T. PIERCE, California.
N. C. SCHAEFFER, Pennsylvania.
H. H. SEERLEY, Iowa.

FUNCTION OF THE NORMAL SCHOOL

I. THE FUNCTION OF THE NORMAL SCHOOL IS TO PREPARE TEACHERS

The work of the normal school is unique. It means more than teaching subjects; it means more than the developing of the character; it means the teaching of subjects that they in turn may be taught; it means the development of character that it in turn may be transfigured into character; it means such a preparation for life that it in turn may prepare others to enter fully, readily, and righteously into their environment. Thus to prepare an individual to lead and direct a little child is a grave responsibility.

II. THE FUNCTION OF THE NORMAL SCHOOL IN ITS RELATION TO ITS FACULTY

The faculty is the soul of the institution. Its members should be superior men and women. In general Tappan's law should hold, that "a teacher should be trained in an institution of a higher grade than the one in which he teaches."

1. *Character* stands first in the hierarchy of qualifications. Nothing can take its place. There are two fundamental elements in it—*force* and *power*. Force is an inherent executive element. Some persons have great force in the administration of affairs; when they are thru, they are forgotten. Some persons administer affairs with power; when they are thru, they still live in the minds and hearts of those with whom they came in contact. A strong man in life—a man of strong character—is one who has both force and power. Force is evolved in putting forth his determinations. Power is the soul in his actions; power is mind and heart.

2. *Teaching ability* stands second—the ability to adapt self and subject to pupil. It is ability to inspire to thought and feeling and action. It is that kind of work which makes for character Teaching may be

defined as causing an individual to think and act physically, mentally, and spiritually.

3. *Scholarship* is the reserve power of every great teacher. It commands respect. It is fertility of mind. A liberal education, special preparation for the particular lines of work to be performed, pedagogical training, with a keen insight into the function of the normal school, are indispensable qualifications.

4. *Culture* gives tone to the entire being. It acts as a tonic in all we do. It is the development of the finer self. It comes from wide scholarship — a liberal education baptized by the spirit of the individual.

5. *A professional spirit and professional ethics* should characterize every member of a faculty. It is that spirit and ethics that binds all parts of an institution together and makes it one grand force for good.

III. THE FUNCTION OF THE NORMAL SCHOOL IN ITS RELATION TO THOSE PREPARING TO TEACH

1. *Fundamental conditions for entrance.*

(*a*) *Maturity.*—Those who enter should be mature. To comprehend subjects and their interpretation and their value in the development of a human being requires maturity of mind. To understand the child as a biological unit, to understand it as a psychological unit, to understand it as a social unit, requires a standard of maturity very far above the prevailing standard in the normal schools. Therefore normal schools should be more cautious in regard to those whom they admit and graduate.

(*b*) *Good health and soundness of organs.*—No person should be admitted to a normal school who has not reasonably good health and who is not sound in all his organs. The development of the germ theory of diseases and infection, in many instances by contact, forbids the reckless inconsideration of this important matter. Again, an individual who is not healthy is, in the very nature of the case, precluded from giving forth his best. It is due the children that those who teach them be hale and sound of body. Sympathy which is often bestowed upon persons of this kind is always at the expense of the children; it is misplaced sympathy.

(*c*) *Natural fitness to teach.*—Natural fitness is a paramount condition in one who is preparing to teach. Education and training do much to give power and skill, yet natural fitness stands superior. The individual who is in close touch with the child, who can blend with it in its sorrows and joys, in its failures and successes, is the one whose presence makes for character — for life. When normal-school authorities are fully convinced that one who is preparing to teach lacks natural aptitude, they should be humane enough, for the sake of the children as well as for the sake of the person in question, to recommend his withdrawal from the school.

(*d*) *Common-sense.*—An intuitive knowledge of common affairs — to

know to do the right thing at the right time. This condition is essential. We see its manifestations daily; we daily see the lack of it. It is an intuitive consciousness of the fitness of things.

(*e*) *High-mindedness.*—Nothing will take the place of this virtue. It is difficult to make a low-minded person high-minded. High-mindedness is the very essence of morality. True training and education may suppress low-minded tendencies, but they cannot eradicate them.

(*f*) *Native ability.*—An ordinary amount of ability is always presupposed. One only who is capable of grasping subjects and relations in the various departments of learning and human endeavor is eligible for admission.

These six conditions are fundamental, inherent, intrinsic. They form the matrix of all learning, of all culture, of all life in the truest sense. The strength of the normal school lies in its recognition of these conditions. This recognition is a very important function. The great abundance of applicants for admission to the normal schools warrants the recognition of these conditions.

2. *Scholastic condition for admission.*

For entrance into the normal school the applicant should have a high-school education. This education includes the elementary-school course, which comprehends a gathering of facts and their simpler relations, as well as a study of the formal subjects which are largely means of expression. It also includes a secondary education, in which the facts and relations gotten in the elementary school are enlarged and organized into sciences. This larger view of human learning and endeavor is very essential when the prospective teacher returns to the elementary subjects for the purpose of gaining a pedagogical interpretation of them. It is this setting which the subjects receive that gives pedagogical insight as to their true evaluation in the process of education. It is this insight that characterizes and makes unique the normal-school work. While the individual is thus gaining this pedagogical insight, he is gaining constructively a broader view of the elementary subjects themselves by bringing to bear upon them the higher subjects. Examples: arithmetic is made richer by algebra and geometry; geography, by physiography and geology; history, by literature; English grammar, by a study of English and literature; the facts of nature, by physics, chemistry, zoölogy, botany, etc.; drawing, by art; civil government, by sociology; physiology, by biology; etc. It is this kind of work that distinguishes normal-school work in the branches from academic work proper, as we find it in the high school. It is professional. To formulate, so far as subjects are concerned: *In the high school the end in view is the subject and its value to the student; in the normal school it is the value of the subject in an educational process and the best mode of presentation to produce the highest value.*

IV. THE FUNCTION OF THE NORMAL SCHOOL IN ITS RELATION TO THE CHILD

The supreme center in education is the child in its relation to its environment. What is in the child, how it got there, the child's development, the end in view, the means employed, its relation to nature, to man, to society, and to Divinity are all pertinent in a discussion of the subject.

From the standpoint of this conception it is a function of the normal school to give an interpretation of the child and child life to its students who are preparing to go out to teach, or to lead and direct, children. Indeed, the work of the normal school is an effort to study the child in all its bearings, to study it historically, by observation, scientifically, or in any way that may give an inkling into its natures and their development.

V. THE FUNCTION OF THE NORMAL SCHOOL IN ITS RELATION TO THE SOCIAL MIND, OR SOCIETY

The social mind is made up of the individual minds. Again, the integration of the individual minds gives the social mind. So we speak of public opinion, public sentiment, public conscience, public will, or the will of the people. Each individual is an organic unit in the social mind. The expressions of the social mind are in our institutions — our institutional life. The home, the school, the church, society, the state are the product of the social mind. This being true, the relation of the normal school to the social mind is a most important one. Indeed, the conception of education already stated becomes apparent: education consists in preparing the individual to enter fully, readily, and righteously into his surroundings. While the relation of the child to society has been largely ignored in the past, it should be reckoned with in the future. The aim of the public school is found in society.

VI. THE FUNCTION OF THE NORMAL SCHOOL IN ITS RELATION TO THE HOME

Between the school-teacher and the home there should be a very intimate relation. The first school the child enters should not differ very much from the home — a good home. The spirit of this first school should be homelike. This sort of school seizes the spirit of the child. It is initiated readily. It eliminates the barrier that usually exists. The intimacy between the parent and teacher should result in a hearty co-operation between them. The teacher should be an adviser of the parent and a companion of the children. There is a marked tendency in this direction brought about by child study and the women's clubs thruout the country.

It is a function of the normal school to impress its students with the close relation of the home and the school.

VII. THE FUNCTION OF THE NORMAL SCHOOL IN ITS RELATION TO THE SUBJECTS TO BE STUDIED BY THOSE PREPARING TO TEACH, OR THE COURSE OF STUDY

A few years ago almost every school had its fixed, ideal course of study, the gauntlet of which every child that remained in school had to run. At present this is not true. There is no constant course of study. It is variable. It is tentative. The course of study is beginning to be as variable as individuals. This is as it should be, and it should be expected in this *nascent* period of pedagogics.

Since the aim of education has been set forth as a preparation for society, the function of the normal school in the preparation of teachers becomes apparent.

In this preparation of a teacher that he may understand the child as an involution of possibilities, and that its education is an evolution of these possibilities under a proper adjustment of its environment, the following centers of interest are suggested from which to derive a course of study. No one of these centers should be ignored in the course. The derivation of a course of study from these centers gives the widest latitude for electives.

The committee feels that the shortest time that should be allowed for the completion of this course is two years, with the understanding that the applicant for admission has, at least, a high-school education or its equivalent.

I. MAN IN HIMSELF

Embracing:

a) Physiology.
b) Psychology.
c) Ethics.
d) Religion.

II. MAN IN THE RACE

Embracing:

a) History.
b) Anthropology.
c) Literature.
d) Genetic psychology.

III. MAN IN NATURE

Embracing:

a) Physics.
b) Chemistry.
c) Biology.
d) Mathematics.
e) Physiography.
f) Astronomy.

IV. MAN IN SOCIETY

Embracing:

a) Sociology.
b) Government.
c) Home.
d) Economics.

V. MAN IN EXPRESSION

Embracing:

a) Language.
b) Drawing.
c) Construction.
d) Physical culture.
e) Music.
f) Art.

VI. MAN IN SCHOOL

Embracing:

a) Philosophy of education.
b) Science and art of teaching.
c) History of education.
d) School economics.

The committee recommends that the above be the course toward which all normal schools should aim; but owing to the diverse conditions existing in various parts of the country relative to normal schools, it deems it advisable that a provisional minimum course, to bridge over the transition period from the academic or semi-academic nature of the normal to the normal as a professional school, be also recommended.

The conditions for entrance to the provisional minimum course, and the course itself, are as follows:

I. ENTRANCE

The applicant shall have finished a grammar-school course embracing the following subjects, in which he is reasonably proficient: arithmetic, English grammar, geography, United States history, physiology and hygiene, drawing, civil government, music, grammar-school algebra, nature study, reading, penmanship, spelling, and English.

II. LENGTH OF MINIMUM COURSE

The course shall extend over a period of four years.

III. THE MINIMUM COURSE

I. MATHEMATICS

1. Arithmetic.
2. Elementary algebra.
3. Plane geometry.

II. LANGUAGE

1. English grammar.
2. English.
3. Elements of rhetoric.

III. SCIENCE

1. Biological science.
   a) Zoölogy.
   b) Botany.
2. Physical science.
   a) Physiography.
   b) Physics.
   c) Chemistry.
3. Nature study.

IV. ART

1. Penmanship.
2. Drawing.
3. Form, color work, etc.
4. Manual training — domestic science or sloyd, or both.
5. Reading.
6. Music.
7. Fine arts.

V. SOCIAL SCIENCE

1. Sociology.
2. History.
3. Civics and economics.

VI. LITERATURE

1. Folk-lore and myth.
2. American literature.
3. English literature.

VII. PHYSICAL CULTURE

1. General physical education.
2. Schoolroom gymnastics.
3. Games in and out of school.
4. Sanitation and schoolroom hygiene.

VIII. PROFESSIONAL WORK

A. Theoretical.
   1. Psychology — one year.
   2. Pedagogy — one year.

B. Practical — training school.
   1. Observation — one year
   2. Teaching — one year.

The following is an outline of the minimum amount of work for the training department of a normal school, that it may make the students practical, successful, and growing teachers for the public schools.

In order to do this the training department should, first, build up in the minds of the students ideals of what instruction in the several branches

should be; second, give them opportunities for actually instructing in the light of these ideals in a sufficient number of subjects and grades, under circumstances and for a length of time sufficient to warrant the faculty in recommending the student as a practical, successful, and growing teacher.

The actual teaching of the students should comprise at least five recitation periods a week for one year, preceded and accompanied by directed observation and discussions of actual recitations and their plans, as well as the writing of plans themselves. The more experienced the "student teacher" is, the more benefit he derives from the criticisms, and the farther he advances the efficiency of the practice school.

GAINING THE IDEAL

In the beginning of the junior year the students should be formed into small groups, perhaps ten in a group, and assigned to the critic teachers, in charge of the grades, for the observation of one, or, if practicable, two, recitations each week, and its thoro criticism under the direction of the critic teacher.

These discussions should involve a criticism of the following points:

I. *The subject-matter.*
   1. Its value.
   2. Its fitness for the children of this age.

II. *Correlation.*
   1. Does the teacher utilize points of preceding recitation?
   2. Does she utilize points used in other studies?

III. *Method.*
   1. Aim.
      a) Form.
      b) Content.
   2. Preparation of pupils' minds.
      a) Relevant and irrelevant questions.
   3. Presentation of the new.
      a) Narrated.
      b) Read.
      c) Developed or questioned.
         (1) Form of questions.
         (2) Content of questions.
         (3) Sequence of questions.
   4. Devices.
   5. Drills.
   6. Summary.

IV. *Results.*

V. *Government of class.*

VI. *Manner of the teacher.*

VII. *Summary of the bad points.*

VIII. *Summary of the good points.*

These groups observe and criticise usually the work of the seniors, which should be good enough to be called "model." The critic teachers and the superintendent should frequently conduct "model" recitations in the presence of the different groups. Nothing in a recitation is capable of proper defense, unless it can be based upon some pedagogical principle; all criticisms should be so based. When a student opposes a point in a recitation, he is held to suggest something better in its place.

When it seems advisable, and long before they are allowed to teach,

juniors are required to write detailed plans for recitations. These plans are subjected to the same thoro criticisms as the recitations that they have observed.

It is in this way that the training department seeks to lay the foundations for the student teacher's ideal of a recitation.

REALIZATION OF THE IDEAL

At the commencement of the senior year the teaching should begin. For each recitation the student prepares a detailed plan, seeking to avoid the errors and to follow the suggestions that he has been led to appreciate in his observations and criticisms. The plan shows the leading questions that he expects to ask and the answers they should bring. He strives, as far as possible, to ask questions that will call for thought on the part of the pupil. The wording of the questions is important, the sequence equally so.

The student should have charge of his first class for one semester, taking another in a different grade and a different subject for the second semester. This will give him a strong feeling of the universality of the pedagogical principles he has been applying. He should be allowed sufficient independence in the discipline of his class to test and strengthen his ability to govern it.

During the senior year a recitation for public criticism should be held in the presence of all the seniors once a week by one of their number, by a critic teacher, or by the superintendent. Two seniors working together should prepare a written criticism according to the outline given above. The teacher who holds the recitation—the practician—should prepare a written self-criticism. This should be read at a subsequent meeting and thoroly discussed.

TRAINING SCHOOLS—THESES

I. A training school should be a place for illustrating, testing, and, at least in part, originating theory of education. It is an essential part of a school for teachers, being necessary for the progress of both students and faculty. But while the training school is established to this end, the first interest in the teaching process is the child; the work can and must be so conducted that the child shall receive a training as good as, or better than, the one he would otherwise be likely to receive.

While the use of a training school for originating theory is subordinate to the other uses named, this use is, nevertheless, of much importance. Both faculty and students should feel that all the good theory is not discovered, and should be constantly on the lookout for ideas. In this way proper progress is made possible.

II. In comparison with other lines of work in a normal school, actual teaching is capable of ranking as the most valuable course for the student, since it furnishes, at the same time, both theory and practice.

Most lines of work aim chiefly to give insight into what is true, good, or advisable; that is, they give mere theory. But while actual teaching contributes much to such insight, it also gives training in the application of this knowledge. It is usually more difficult to apply knowledge than it is to acquire it; but since practice in teaching does both, it is an especially valuable line of work.

III. The training school in a state normal school should contain a kindergarten as well as the eight grades. Even tho the normal school may not aim to send out kindergartners, a good kindergarten is very desirable, because the younger the children under instruction, the more fully are teachers and observers forced into a proper appreciation of the fundamental principles of teaching.

The younger the child, the more the teacher is forced to be really pedagogical. For example, the college professor may have his mind on his subject-matter and ignore the students by gazing out of the window, yet they will remain respectful and at least apparently attentive. But if the kindergartner were to do the same thing, the children would cease to pay any attention to her; they would play with one another and leave the room. She *must* think of them first; she *must* be pedagogical, and, therefore, she *is*. The college professor does not have to be, and, therefore, up to the present time he very often *is not*. For this reason primarily it is desirable that normal-school students come in frequent contact with a kindergarten, even tho they are not planning to be teachers in the kindergarten themselves.

The training school may well include a country school also, since the normal schools must train country teachers. But this is scarcely feasible, unless there is an actual country school within easy reach of the normal.

IV. The number of children intrusted to a beginning student teacher should be small, approximately ten to twelve. The reason is that the chief problems involved in instruction are presented by the smaller classes and the student is less likely to be distracted or overwhelmed by mere numbers.

The object of this arrangement is properly to grade the difficulties with which the practicing teacher must contend. The ability to handle large numbers can well be acquired after some skill and self-confidence have been developed in the instruction of small classes.

V. The number of children in a grade might well be approximately forty, as in public schools, these being divided into two groups of different advancement.

The training school should be, to a large extent, a duplicate of the public school, so that the more experienced practice teachers may finally meet the same difficulties that they will later meet in schools of their own.

VI. The training school should be practically under the control of the normal-school authorities to such an extent that the latter can formulate a curriculum, select text-books, choose and dismiss teachers, determine

methods, and in general administer the affairs of the school according to their own best judgment.

Since public schools, and private schools with high tuition, cannot usually meet these conditions, they cannot generally be expected to make the best training schools.

VII. The president of a state normal school should have ultimate control of the training school in all particulars, but he may delegate this authority according to later theses here presented.

VIII. The training school should be under the direct control of a principal. He should—

1. Have general control of the school.

2. Formulate the curriculum after consultation with heads of departments and critic teachers.

3. Determine methods to be followed, also apparatus and books to be used.

4. Supervise the critic teachers and the student teachers.

5. Call together critic teachers, student teachers, or heads of departments in the normal school for consultation.

While the training school involves work in which all members of the faculty should share, responsibility for the curriculum, for method, and for general management must be centered in one person.

IX. Heads of departments in the normal school should be supervisors in fact of their subjects in the training school, as follows:

1. They should propose in writing to the principal the subject-matter for the curriculum in their respective studies.

2. They should propose to the principal what seems to them the leading points in method involved in the presentation of the subject-matter suggested.

3. They should assist the principal in supervising the instruction of critic and student teachers in their special studies, offering suggestions and exchanging ideas freely.

These duties should be performed by the heads of departments for their own good as well as for the good of the training school.

The heads of departments should not be given authority to determine fully the curriculum in their respective studies, because they are likely to overestimate the relative worth of their subjects, and are partially unacquainted with the other requirements that are necessarily made upon the children. But they should be active advisors to the principal as well as to the critic and student teachers; and in case they have serious disagreement with the rulings of the principal, they can, of course, appeal to the president of the normal school.

X. Next to a wholesome personality, the special feature of a critic teacher should be the ability to show particularly the merits, as well as the defects, of instruction, basing the criticism plainly upon accepted principles of teaching.

According to Thesis II, practice in teaching is capable of ranking as the most valuable course in a normal school. Its worth, however, depends primarily upon the qualities

of the regular teacher as a critic. Her power in this direction can be gauged neither by her quality of knowledge nor by her skill as an instructor; it is something separate from both of these. To secure that power a higher training is necessary than is generally found among critic teachers, and consequently an unusually high salary should be paid for it.

XI. There should be at least one critic teacher to each grade room.

Unless there is at least one critic to each grade room, much of the student teaching cannot be seen by a critic teacher, so that both the student teachers and the children instructed by them are suffering serious neglect. That condition of affairs is not allowable in a properly equipped training school.

XII. This critic teacher should (1) instruct her children a considerable portion of the time; at least, no class should be turned over wholly to student teachers; (2) criticise, accept, and reject plans for teaching presented by student teachers, taking the final responsibility for the plans followed; (3) observe and criticise closely at least *most* of the instruction given to her children by student teachers.

While the principal of the training school, the heads of departments, etc., mark out the curriculum and determine the method to be followed in a large way, a definite responsibility should fall upon the critic teacher herself. She should be fully responsible for carrying out, in detail, the work which these others have suggested; she and the student teacher must be directly responsible for the final plans adopted by the latter.

XIII. Beside giving daily private criticism to individual student teachers, the critic teacher should unite with others, including a considerable number of students, in an exhaustive discussion of a recitation which all present have witnessed. Such a discussion might take place once every two weeks. Its peculiar objects are: (1) to show how many different matters are involved in a twenty- or thirty-minute recitation; (2) to show how most of these details are controlled by a few great educational principles.

These objects can be attained, provided (1) those present take part freely in the discussion, each stating what impressed him especially; (2) a full hour or more be set for this purpose.

The plan of such a recitation should be distributed and carefully examined beforehand by those who are to observe the recitation.

In such a discussion the written plan might first receive careful consideration, without reference to the actual execution. Then the manner of education might be discussed, care being taken to eliminate the new personal criticism that might be unfitted for public presentation.

The daily private criticisms are usually hurried and touch only upon the more salient matters; this occasional detailed criticism, where a considerable number of persons make suggestions, should supplement the daily work.

The written plan might often be discussed before the recitation, rather than after, since in that way the recitation itself would be observed with much more interest and care.

XIV. Presupposing good and close criticism on the part of the critic teacher, the minimum amount of instruction given by a student teacher should not be less than one recitation period per day for one year.

Teaching is an art that must be learned, and it is so difficult that it requires time. The object of this student teaching is not merely to see whether the practician can teach passably well or not, but rather to take the practician at whatever point of development he may already have reached, and lead him to improve in his instruction.

For example, it requires a good deal of time and practice to accustom teachers to make summaries at the proper time, to review and apply sufficiently the knowledge already acquired, and to rank facts according to their relative worth. If the application of theory were easy, there would need be little student teaching; but since it is recognized as one of the most difficult of tasks, there should be abundant provision for it.

XV. No normal school should accept so many students that it cannot give this minimum amount of student teaching. In other words, the size of the training school should be one of the most important factors in limiting the size of a normal school.

Just as the size of a laboratory should limit the number of students in a class in science, so the size of the training school should limit the number allowed to enter a normal school.

XVI Some observation work should precede actual instruction on the part of any student teacher.

XVII. This observation, however, is comparatively worthless, unless it is supervised and discussed with the same care as the actual teaching of a student teacher.

When students know that a strict account must be rendered of all that is observed in a class, and reasons must be given either in favor of or against the steps that are taken, they will observe with far greater accuracy and learn far more about teaching One of the surest ways of discouraging a prospective teacher and destroying his interest is to require him to observe regularly without the pressure of close supervision.

XVIII. This observation can, perhaps, be best carried on as follows:

1. A considerable number of students can together observe a recitation and take notes carefully, often quoting the exact words of the teacher and pupils, in order really to prove their points later.

2. These notes should later be carefully arranged with the view of passing a well-grounded judgment in detail upon the lesson.

3. Then all should meet together, including the instructor in charge, and exchange and discuss their views.

One lesson per week observed and discussed in this manner is far more valuable than daily observations that are not followed by such discussions.

Accurate notes, suggested under 1, are particularly important. Teachers of experience, as well as those lacking experience, often put questions in a form that is very awkward or indefinite; they also repeat the same question. But they are so unconscious of the fact while it is taking place that they scarcely believe that it did take place when afterward assured of it by the critic. In such cases conviction is best established if the

critic can reproduce the exact words of the instructor. But aside from this reason, accurate notes allow definite and scientific criticisms in general.

XIX. The observation suggested in Thesis XVII is a regular course of study, aside from the observations that students may be called upon to make by professors in the normal school who illustrate their theories thru classes of children from the training school. Of course, however, this latter work is highly desirable.

The object of the latter kind of observation is primarily an insight into educational theory; that of the former is to see how that theory is carried into practice. In the former kind the observers are much more critically minded than in the latter, so that, on the whole, the purposes of the two kinds of observation are occasionally different.

XX. In making observations according to Thesis XVII it is not necessary to observe expert teaching all of the time.

There are two special reasons for this statement: in the first place, if the instruction observed is given by an inexperienced teacher, friction reveals itself much more easily, so that criticism is easier; in the second place, if the observers know that the teacher is not considered an expert, they are much more likely to criticise the recitation on its merits, pointing out both the strong and weak points freely; but if the instructor happens to be an expert, they feel it presumptuous on their part to attempt to analyze the recitation: they then not only omit mentioning the defects, but even their praise is not specific.

What has thus far been stated is not intended to indicate that there should be little or no observation of expert teaching. There is strong reason for observing such teaching extensively, since it helps greatly to fix an ideal in the student teacher's mind.

XXI. After a sufficient amount of observation students should be allowed to begin their practice teaching along lines of their greatest strength.

Young teachers are prone to discouragement, being easily overcome by the multitude of new obstacles which they are obliged to encounter; they should, therefore, be allowed to enter upon teaching in the study in which they feel strongest. In this way provision will be made for self-confidence from the beginning; they can later move over to other branches and thus develop a more general confidence.

XXII. They should be allowed to specialize to some extent in kindergarten work, in primary or grammar grades, but not fully.

Proper instruction of children necessitates a fair comprehension of work which precedes and follows a given period; therefore, students under training for teaching should not be allowed to limit themselves to one grade of work.

XXIII. If possible, the student teacher should have full charge of a room for a few weeks, but usually not until he has somewhat accustomed himself to teaching and has proved his efficiency in some one study.

The plan in general is, therefore, as follows: (1) observation work, (2) practice in teaching in one study, (3) practice in teaching where the instructor is in charge of a room. By this arrangement the difficulties are carefully graded.

XXIV. Until a high degree of independence and skill in planning and conducting recitations has been proved, the written plan of each recitation, after having been accepted by the critic teacher, should lie

upon the table in the room during the period of instruction, subject to general inspection.

After a time, when the student teacher has shown that he is conscientious and somewhat skilled, he should certainly be relieved of writing out his plan in full, for that work then involves unnecessary labor.

XXV. The idea that a training school should be provided with a practice school, and a model school besides, is hardly a feasible one. Aside from the financial difficulties involved, it is probable that a well-conducted practice school will not be inferior to the so-called model school.

There are several reasons for these assertions: (1) The different heads of departments, as supervisors, are likely to be more directly connected with a practice school than with a model school, because the presence of student teachers obliges them to visit the rooms frequently; in a model school the same obligation is not present. (2) The critic teachers, because they are critic teachers, are likely to be much more active-minded than they otherwise would be. They are directly responsible for the acceptance of the plans of student teachers; they must also show the merits and defects of the instruction that has been given, basing their statements upon the principles of teaching; pressure of this kind forces them constantly to think over their work with care. In fact, this kind of work requires the greatest degree of mental activity and forces the critic teachers into frequent discoveries of weakness on their part, and also of new thoughts. (3) A practice school, because it is a practice school, is surrounded by an experimental atmosphere; this, instead of being a defect, is a marked merit. It means that all persons concerned in the school are looking for progressive ideas and practices.

The soundness of these statements is suggested from the fact that the well-conducted training schools in the country are commonly recognized as being superior to the public schools in their neighborhood. Some of the training schools in the state normal schools even charge tuition, and still, in the minds of the public, maintain their superiority over the public schools that are conducted by graduates of the normal school.

It certainly must be admitted that even in a well-conducted training school there will be frequent blundering on the part of student teachers; one may even say, very serious blundering. But when the heads of departments, as supervisors, do their work properly; when the critic teacher examines the plans with care before accepting them, and is present most of the time to offer criticisms, or to take charge of the class if necessary; then the opportunities for serious error are reduced to a minimum. It should be remembered also that it is not solely in training schools that egregious blundering takes place; much of the worst teaching in the country is found in private schools and in the schools that have little supervision. The fact that there is no practice teaching in certain schools is no proof whatever that radical mistakes in instruction will be wanting. It must be admitted from the start that errors of many kinds creep into every school; and the only way to prevent a good part of them is to provide for a great abundance of supervision and pressure toward good work. This provision is so abundantly made in good training schools that it more than counterbalances the possible evils of practice teaching.

XXVI. In case No. XXVIII is not accepted, still the training school can and should be a model in the following very important respects:

1. In the construction of the school building.
2. In laboratory facilities.
3. In library facilities.
4. In artistic decoration.

5. In the attention given to the individual pupil from the physical, mental, and moral point of view.

6. In the relation that exists between the teachers and the children.

7. In the relation existing between the teachers and parents.

8. In the curriculum that is adopted.

9. In the plans of recitations.

It should be one object of the training school to present a standard for the public schools in all these respects. Of course, the needs and conditions of public-school work should be taken into consideration, and the training school should adopt a model which seems within the reach of other public schools. In most of these nine points, several of which are radically important, the training school, because it is a practice school, is likely to be superior to other schools.

XXVII. From the above statements it follows that the name *model school*, as applied to the department where students receive practice in teaching, is not entirely a misnomer. Probably, however, *training school* is a better term. But either of these names is preferable to *practice school.* This name does not throw emphasis upon the fact that there are carefully prepared plans and numerous active supervisors. It is usually taken in its lower sense, meaning experimenting, rather than practicing, in the sense that a physician practices medicine. On that account it depreciates the work of student teachers, both in their own eyes and in those of parents and children. There is a good deal in a name, and it is highly desirable that one be chosen that overestimates, to some extent, the quality of work done, rather than one that underestimates it.

As the name *training school* does not seem to have either of these defects, it is recommended as the preferable one.

XXVIII. The training school should be the correlating center of the normal school.

1. The curriculum of the training school should directly influence that of the normal school; for example:

(*a*) Since home geography, including excursions, is required in the training school, there should be such a topic, including excursions, as a part of the normal-school course in geography.

(*b*) Since the training school requires an abundance of imaginative literature, such as fairy tales, legends, and myths, such literature should constitute an important part of the normal-school course in literature.

(*c*) If concrete geometry is required in the grades, it should constitute a part of the work in geometry in the normal-school curriculum.

(*d*) If the arithmetical problems in the grades are to be correlated with other lines of study, so that the content of these problems may be of real worth, the same degree of correlation should be required in the normal-school problems.

2. The method of teaching in the normal school should be essentially the same as that pursued in the training school, since both are founded upon the same general principles.

Of course, there must be differences, but they are differences in non-essentials and devices, and not differences of principles. According to Kant, method is procedure according to principles (*Critique of Pure Reason*, translated by Meiklejohn, p. 516). One may rightly, therefore, speak of the same method being employed in the training school as is employed in the normal. The meaning of this requirement can be illustrated in the following way:

(*a*) It is a principle of teaching that we reach new knowledge, emotions, and volitions thru related old knowledge, emotions, and volitions. Accordingly, in the instruction of children we take pains to glide thru the old into the new. The same pains should be taken in the normal schools with adult students.

(*b*) It is another principle of teaching that the learner should be told as little as possible, and be allowed to discover as much as possible for himself. This, in the training school, leads the teacher to reduce her topics to a conversational basis, so that the children may offer suggestions, present questions, etc. The same principle applied to normal-school work must lead professors to allow the adult students, likewise, to propose and answer many problems.

In other words, if children in the grades, on account of the principle of self-activity, are not expected mainly to reproduce the content of text-books, or listen to lectures, there is little more reason for allowing it in normal-school instruction.

(*c*) Influenced by the belief that a live interest in studies is the condition under which these studies will have the proper effect upon thought and conduct, the teachers in the training school watch primarily the children's attitude of mind toward their subjects, making the acquisition of knowledge relatively a minor matter. If that belief is a sound one for children, it is just as sound for adults.

(*d*) If grade teachers should present the concrete before the abstract, under the belief that new generalizations must be reached inductively, the normal-school instructor should do the same thing.

There is another, very different and radically important, argument for the statement that the method of teaching in the normal school shall be essentially the same as that in the training school. In spite of all the theory that we offer to students in regard to the method of teaching, they will always teach largely as they have been taught; that is, even with adults the tendency to imitate is a very marked characteristic, and shows itself very plainly in teaching. If a normal-school professor himself teaches in one way and still expects his students to follow essentially a different way with children, he is likely to be greatly disappointed. The actual method followed by the normal-school professor is concrete, so that it can be seen; that very fact allows it to make a much deeper impression upon a student than the opposing theory which may be

presented. One of the very best ways, therefore, for a normal school to secure good teaching from its students is for the faculty itself to impart instruction essentially in the same way in which it hopes to have the students impart it.

3. There should be frequent faculty meetings, whose subjects of discussion should bear close relation to the training school and often spring out of it directly. Lessons should be taught in the presence of the faculty and followed by exhaustive criticism on the part of the faculty.

In other words, the faculty meetings in a normal school should be directed, not merely to executive work, or primarily to that, but to instruction; and since the work of the normal school culminates in the instruction of children, topics directly involved in the instruction of children should be the subjects for frequent faculty discussion.

Only when Thesis XXVIII, with its three divisions, is kept in mind and practiced can the real aim of the entire institution called a normal school be kept in the foreground, and the unity of the school be preserved.

Points 1 and 2 under Thesis XXVIII are probably the most important ones in this entire list; and the central thought in them is that the faculty of the normal school should itself practice the things which it wants its students later to put into practice.

XXIX. Since state normal schools are usually situated in cities possessing excellent systems of graded schools, it is recommended that such relations with the city schools be sought as will enable those student teachers who have successfully completed the major part of their training to serve as unpaid assistants under conditions which will render such services mutually profitable.

In establishing these relations, care should be taken that assistants be sent only where such service is deemed desirable by both the city superintendent and the responsible teacher in charge of the room.

Student teachers so appointed should be led to appreciate that such opportunities to make their assistance profitable to the pupils of a regularly organized school furnish at the same time the most valuable experience and the best test of teaching ability.

Student teachers enjoying these opportunities might be expected to serve with or without compensation as temporary substitutes in grades in which they have served as assistants.

GEOGRAPHICAL AND HISTORICAL VARIATIONS THAT EXIST IN NORMAL SCHOOLS IN THE UNITED STATES

I. *The schools, being provincial, have certain limitations geographically.*—A state normal school in every state where such a school exists is founded on the theory that it is the duty of the state to prepare teachers for the need of the schools of that particular state, and not on the theory that citizens have a right to such preparation as will best fit them for the

business of teaching in general. Hence the requirement of signing a contract with the authorities of the state, agreeing to teach for a stated time in the public schools of that state, or at least declaring the intention of preparing to teach in the schools of that state, is almost universal. This custom, commonly enforced by statute, discriminates against professional teachers to an extent unheard of in other vocations. Many of these same states have organized schools for the giving of collegiate education, and also law, medecine, dentistry, pharmacy, engineering, dairying, etc., without any restrictive conditions whatever. The state normal schools alone are thus limited to the state lines for their students; their graduates alone are restricted to a definite field in which to labor by the student contracts thus made to get advantage of the education offered, and by granting them state certificates which have no recognition outside of the state in which they are issued. This condition of affairs exists to such an extent that there is little reciprocity between the states, and the business of teaching is too generally treated as a profession without either standard or basis of recognition except that granted by provincial or state lines.

II. *The course of study of these schools.*—In many of the states the legal requirements for state certificates, as well as statutory acts governing the schools, have a decisive effect upon determining the course of study that the school can grant. These conditions, united with many minor variable factors, which cannot all be enumerated, give great variety to these schools in different parts of the United States. The province of these institutions is governed somewhat by the conditions in the several states. The questions what student is capable of being admitted, what kind of teachers are to be prepared, what extent should be given to the work to be done, are all decided by the individual needs and conditions of the several states. Where rural teachers are in the majority, there the standard is of a low grade; where high schools are numerous, and where the privilege to enter such schools is generous, there high-school graduation is the standard of admission.

The standards also of these schools vary as do their names. In some the tendency is to develop to college grade and give regular college degrees, or degrees that are different in name, but equivalent in quality. In some the aim is to have the schools purely professional, no regular academic work being offered as a part of the course of study. In others they are secondary schools in fact, with very little professional work or pedagogic and practical training; and at times they are of a lower scholastic grade than the secondary schools. The schools which give all the instruction, both academic and professional, are in the majority; the purely professional schools are very few, and the purely academic schools are gradually growing fewer from decade to decade.

III. *Recognition given graduates from state normal schools in their own states.*—There is very large variation as to state practice in recognizing

the work done at these schools. The conditions imposed to obtain state certificates, and the encouragement accorded to those who become professionally educated to enter the business of teaching, are as follows: (1) In some states the diploma of the school is authority to teach in that state. (2) In some states a board of examiners, outside of the authority in control of the management of the normal schools, has the power of deciding who can graduate from said schools and who can hold state certificates. (3) In some states the diploma of the school is not conferred until the person who has completed the course has taught successfully two or more years after graduation, when it carries the authority as a state certificate to teach in said state. (4) In some states the graduates are examined by the common authority to issue the local certificates authorized by law, and there are no state certificates. (5) In some states the state superintendent has the authority to countersign such state normal diplomas as he is satisfied are held by competent and successful teachers, which makes them state certificates. (6) In some states the students graduate from the schools on the authority of the management of the schools, but the right to a state certificate is decided by another board entirely outside of the school, which may grant such graduates certificates according to law, if such seems desirable and, at the same time, regardful of the public good.

IV. *Training schools, practice schools, model schools.*—There is also much variation regarding the province of a well-organized school of children as a part of the normal school. In name they are also variable. They are called training schools, practice schools, model schools, according as the interest and purpose of these schools differ. Some schools regard this part of the instruction and training as the most prominent part of the course of study and of work, giving not only practice in actual training, but also instruction in special methods by this agency. A *very* few do not regard the practice of teaching as either a positive help or a safe and certain means in the training of a teacher. They consider the candidate being trained as so hampered by theory and by close, critical supervision that he is deprived of spontaneity and essential freedom. Some give great credit to the value of observation as a help to training, while others do not consider it as a factor of sufficient importance to justify the large expenditure of time generally given.

As regards the length of time considered necessary to devote to practice teaching, the variation is all the way from two years to two terms, while some do not think a definite length of time so important as that the proposed teacher should be required to satisfy the training department as to skill in the same degree that he satisfies other departments of the school.

V. *Types of normal schools in the United States according to geographical location.*—A careful study of all the different characteristics of state

normal schools found in the United States will determine the fact that each section of the union has its own peculiarities of type and development, as the needs and the circumstances of the different parts of the republic require. Only the broadest differentiation can be emphasized here, but a study of these will prepare the investigator to make easily the differentiations which exist between states, and even in some instances between different localities of the same state.

1. *The New England state normal school.* — This type of school is most fully developed in Massachusetts, where the work deals with students who are high-school graduates from a good four-years' course. It admits none except actual teachers, or those intending to be teachers. The actual teachers are granted special privileges because of their experience, but they are not the larger number who graduate from the school and go out as its representatives. The minimum academic requirements for graduation are English and literature, mathematics, science, and history; the subjects of the course not being very largely beyond the good high-school courses, but the teaching of the subjects being much more thoro and from a different standpoint than in the secondary school, and being regarded as professional. Music, drawing, elementary science, physical training, literature, and history suitable for children receive much attention in the preparation of the teacher for the work expected. The pedagogical work consists of psychology, pedagogy, and history of education, each course covering a year of study. Most of these schools have courses of two or three years, in which the definite limit of time attendance required in all cases is an individual question. It is asserted unanimously that the function of the normal school is not to do distinctively academic work. The other states of this section do not reach this standard of entrance or graduation, but they regard this condition as desirable of early attainment.

2. *The southern state normal school.* — There are two phases to the southern normal school: one which is planned for white students, modeled, as far as possible, on the best lines, scholastic and professional; and one which is planned for colored students, where elementary professional training is combined with special industrial instruction. In the first the problems are much like the problems of the normal schools of other parts of the union. In the second the problems are distinctly special and local, and have in mind many more interests and economic needs than simply the preparation of teachers to teach the ordinary school alone, as it is the theory that these industrially trained colored normal graduates have a larger and more fundamental mission than simply the scholastic instruction commonly considered as the province of the elementary school. They are to give a special trend to the industrial activities of the people among whom they labor, and are to become leaders in all progress, intellectual and economic.

3. *The middle states normal school.* — These states have special characteristics as regards the organization and conduct of their schools. Most of the schools in this region are managed by joint local and state authority — the local predominating as regards numbers of trustees and business management.

In Pennsylvania all of the thirteen schools maintain preparatory classes below the entrance requirements of the several two-, three-, and four-year professional courses of study. In addition, they maintain commercial and other academic studies, but the state contributes only to the support of the professional student, the other students paying their entire expenses.

In the state of New York the admission of students is limited to persons recommended by the school commissioners. In New Jersey admission to its one normal school is obtained by passing a satisfactory examination at the school, and none but professional students are received. The fact is that each state has solved the problem according to its own individual needs, and without much attention to future development or demands. In New York there is one state normal school of a high grade located at Albany; the others are of the common standard which generally prevails thruout the country. There is a tendency in the middle states to accept this plan as the best for future adoption: one school of high grade and many schools with a standard of admission as high as the condition of the elementary education of applicants will permit. In Maryland and New Jersey, where but one normal school is maintained in each state, the authorities require such a standard that they secure the preparation of the teachers who occupy the best-paid positions. The larger the salary obtainable, the better the candidate will prepare for his vocation, and the more is he drawn away from the rural schools, whose salaries are not sufficient to induce one to go into the business as a permanent calling.

The system of payment on enrollment, or even on results, makes the reputation or the income or the success of the school depend upon the number of students enrolled or the number passing the examinations. This produces a temptation to lower the requirements for entrance, and also for graduation, to the minimum that will be acceptable or permissible. This condition does not necessarily exist to so large an extent where a school has a fixed income from state revenues or annual appropriations.

4. *The Mississippi valley normal school.* — In this section of the union the normal schools had their origin principally thru legislative action, the same as universities and agricultural colleges, except that in most cases they have had no advantages of land grants or special permanent endowments, as the higher educational institutions have had. These normal schools are, however, a part of the educational system of the states in which they are located, and are not dependent upon local support, local financial aid, or local management. Their students are of three

kinds: (*a*) graduates of good high schools; (*b*) practical teachers already possessed of county teachers' certificates and of considerable experience as teachers in rural schools; (*c*) such persons as can pass an examination and are of prescribed age. None but professional students are received, and hence their enrollments mean much more to the teacher supply than it would in states where academic and commercial students are enumerated as attending the normal schools. These schools are generally recognized by the state universities as fitting schools, with the right to have their graduates admitted to advanced standing, the usual custom being to grant junior-class standing to normal-school graduates of the standard four-year course commonly offered. This has had the effect of benefiting both the normal schools and the universities, and of placing in the schools as superintendents and high-school teachers a large number of competent educators who are graduates of both the normal school and the university. The tendency in this region is to have one large and strong school of a high grade, approximating to a college for teachers, and a number of schools of lower grade to prepare teachers for the more elementary grades of public schools. In most of the states this tendency has not yet assumed actual form, but there is gradually growing a sentiment in favor of this kind of an organization. The attendance at these schools is in most cases very large; and, as a consequence, they are gradually coming to a plan which offers all the work of the several terms of the several courses each term of the school year, thus allowing individual students to graduate at the close of any term of the school year. There is also a decided movement to open the schools for a summer term, making practically a continuous session of the school. This is due to the great need of better-educated teachers. There is no kind of schools in this region so rapidly developing, or so cordially supported, as the state normal schools. The chief problem of all these states is elementary education. The conditions compel the normal schools to meet the public demand rather than exploit theory, and it is a large work to undertake to unify the various nationalities into one people with the English language, and at the same time unite them in interest, sympathy, and labor for the common good of the common country. The normal schools, therefore, seek to meet a known positive demand, and are thereby wielding a mighty influence in shaping public sentiment and educational practice.

The academic requirements of these schools are quite uniform, excepting the college grade school where already established. A four-year course of study beyond the county superintendent's license standard is the common course offered. This course usually allows some choice to the student, in which language, science, or history has minimum and maximum limits, permitting the individual student to have some preference according to his taste and special capability, but at the same time insisting upon enough uniformity to assume that either one of the lines

elected is a satisfactory preparation for a public-school teacher. The practice school is a department essential to proper normal training. The method of using this part of the prescribed course greatly varies. Where the need of scholarship is the chief public demand, there practice is at a minimum ; where the demand is strong for the critically trained teacher, there practice is at a maximum. The coming plan, therefore, promises to require no actually definite amount as to time of either observation or practice, but that each student being trained shall satisfy the department of practice the same as he now does the other departments of the school.

The majority of these schools believe that, to secure the kind of academic instruction which their students need as to thoroness and extent in the branches to be taught, the function of the normal school, while professional in the main, will always continue to give academic instruction, despite the theory, so frequently advanced, that this academic work ought to be relegated to other educational agencies. It should be borne in mind that the academic instruction here mentioned is from the teacher's standpoint, which renders it a different kind of work from that given in other kinds of schools.

5. *The Pacific slope normal school.* — The normal schools of this section do not need to furnish all the teachers required by their elementary schools, since many reasons have led to a large teacher population, well-educated and professionally trained, coming from other states. This condition of population has enabled these schools, in even the younger states, to set a higher standard for entrance than has been possible in other states of the union. The general opinion, therefore, prevails here that a full high-school education should be the minimum standard of entrance. In addition, many of these schools do not undertake to prepare teachers for any work beyond primary and grammar grades, as the limits placed upon the certificates of authority granted as teachers to their graduates forbid their teaching in higher grades, an additional college-standard examination being required to enable one to teach in high-school grades. This has the effect of keeping the course of study within the essential limits, and also enables more attention to be given to special lines and to training in the practice school than is common in other regions of the union. The welcome granted in these states to graduates of normal schools from the other states and from Canada, as shown by the courtesy quite generally conceded to them by accepting their diplomas as evidence of ability to teach and authorizing them to teach anywhere in elementary grades, has induced thousands of teachers of high-grade preparation to make their home here, thus giving this region, in fact, an excellent corps of teachers.

Conclusion. — All these observations lead to the conclusion that there has been constant progress in the three-quarters of a century the state normal schools have existed. That progress has been both experimental

and evolutionary. The changes that have come to the possibilities and needs have always found the normal school ready to adapt itself to the new conditions. The normal school has been so near the public thought all this time that it is more nearly today an actual exponent of public sentiment than any other public institution of equivalent magnitude. It is specially sensitive to public demand, and sincerely endeavors to do for the people what is assumed to be essential to prepare teachers for the public schools. This accounts for much of the variation that is known to exist at present, and it is evident that, with a better knowledge of what has been accomplished in the different states in the preparation of teachers, and what ideals prevail in producing the different characteristics of strength and successful results now known to be attained, there will be found more satisfactory and uniform results, more sympathetic relation among the workers in this great field of labor, and a loftier conception of what the American teacher must become to fill the place of destiny conferred by democracy and Christianity.

THE INNER LIFE OF A NORMAL SCHOOL

The establishment and organization of a normal school has a definite design — that of preparing teachers for public-school work. To meet this designed purpose certain kinds of work are naturally undertaken. These lines are definitely determined, and plans are arranged to accomplish the purpose with certainty and with efficiency. The plans of the board of trustees, the legislation of the faculty, the class work required, the course of study arranged, are all designed influences that have constantly in view the end to be reached.

But there are other influences in the school that must not be left out of the reckoning in developing and training a teacher for public work, as they are among the most powerful agents in bringing out the character, in testing strength, and in measuring the manly gifts, original and acquired, that betoken leadership and promise in the active life beyond the school days. While not underestimating the efforts of board and faculty in bringing to bear upon the student body these designed personal influences, it is certainly not necessary to forget what the students do for themselves socially, personally, intellectually, and morally, thru the inner life of the institution.

1. *Intellectual life and culture.* — Under proper management and care the literary life of the institution can be much elevated and encouraged by the students thru self-help and self-dependence, as exhibited thru the literary societies. If there are good reasons why students of colleges and

other schools should be encouraged to organize and maintain literary societies, there are yet many more important reasons why student teachers should enjoy and use this privilege. Teachers should be trained to write and speak. They should be at home on the page of the periodical and on the platform. They should not only have ideas and theories, but they should acquire the power to impress them upon others. In no way can public educational interest be advanced and public opinion better established than thru a proper use of the press and the platform. These literary societies should control their own internal affairs, they should do more to develop their members than to entertain audiences, and they should have great encouragement from faculties and boards of trustees, as after-years will demonstrate the fact that no work at the school gave a student better command of himself than active membership in the literary society.

2. *Religious life and culture.* — In recent years there has been great development in the social and religious organizations of young men and women of America. In the school life of normal schools there is probably collected a larger percentage of serious-minded, thoughtful, earnest people than in any other kind of an educational institution. The majority of them have a definite purpose, and are prepared to do very much for each other socially, morally, and religiously. Wherever the student organizations known as Young Men's Christian Associations and Young Women's Christian Associations are encouraged and authorized to exist, there great benefit has always come to the moral and religious life of the general student body. These associations conduct social meetings that are of marked benefit in developing the social spirit and nature of the whole student body. They provide for religious meetings, such as public service or Sunday prayer-meetings, Sunday schools, missionary circles, pledged Bible-study classes, systematically conducted, lectures on social and religious subjects, that have a decided influence in giving a chance for the exercise of the religious and spiritual nature of all interested.

They also have a positively good effect upon the government of the school. Where they are given reasonable freedom and co-operation, they will be able to prevent nearly all the cases of discipline that would arise, as they seek ways and means as organizations to reach all students whose personal and social life does not conform with the high standard assumed for a teacher.

3. *Social life and culture.* — It is a well-known fact that many persons who decide to give their lives to educational work are deficient in a personal knowledge of social courtesies, and have no experience in the practice of such amenities as must have much to do with their careers as men and women of power and efficiency. At the normal school this work of regeneration and reform must be accomplished, if the life to be consecrated to the profession is to receive the recognition its natural gifts merit. The members of the faculty can do something to meet this need,

but the students themselves, thru the advanced classes, must carry on a work that means as much in the education of a teacher as any other exercises regularly designed and organized. This work can be kept in the foreground by certain friendly conversational lectures given by members of the faculty and other well-informed persons on these problems of social life and culture. These lectures should be given to the sexes separately, the subjects being selected by the students themselves and the discussion to follow being more in the form of an inquiry than a quiz. By this means cultivated ladies and gentlemen can give presentation of these topics in such a manner that remarkable effects are noticeable. Then these advanced students can easily maintain a kind of social life in the boarding houses by their example and their instruction, so that great things are accomplished without much labor. It is better to leave the management of such things to the students, as it will always be received with more favor, and will accomplish more with less work, than when supported and directed by the faculty. To accomplish these effects, and to reach the broader opportunity for the extension of this culture, the speakers and the conductors of these meetings should be men and women of special gifts and training thru experience in social life, without regard to membership in the faculty. In fact, the outside speaker will frequently be more effective in creating interest and producing results than persons intimately acquainted with the students, as members of the faculty are.

4. *The spirit of the school.*—Among those influences that count for most in the development of the individual is the spirit of the school in which he is a member. This spirit has decided effect upon the student, according as it stands for excellence in scholarship, high-minded purpose, and strength of character. It creates a public opinion in the student body that practically determines the conduct and tendency of individual life and decides the ideals that are assumed as foremost in student careers. The so-called college spirit that is noted by yells and confusion and organized enthusiasm, and that frequently contributes to disorder and to lawlessness, is not the student spirit needed at a normal school. Teachers who are to become administrators of work and managers of children need a training in self-government and self-control that the so-called school spirit common in America would depreciate and destroy. To this end the spirit of normal-school life should be of that law-abiding, authority-supporting, quiet-preserving kind which makes the students representatives of what is best in public and social life.

There is also a tendency in modern education, thru athletic contests, oratorical contests, debating contests, etc., that cannot be omitted from present attention in this report. These organizations, while excellent agencies of themselves in developing the power, the skill, and the spirit of student life, are very frequently allowed also to develop a disposition to

scheme, to deceive, and to practice fraud. Further than this, a spirit of gambling on possible results has begun to be marked to such a degree that the best possible results to student life are often greatly depreciated. The ambition to win at all hazards, and by any method, without regard for merit, honesty, or candor, is greatly to be deplored as an evil tendency of the times. The spirit of the true normal school must always be free from such types of student character and aim, as such influences degenerate individual character and debase conscience — essential elements in a teacher. Hence normal schools, in order to be able fully to reach the end and object of their founding, must continually be preserved from these vices of school spirit wrongly directed and falsely assumed and interpreted, however much they may be popularized in recent educational thought and practice.

In the creation of this ideal spirit the influence of the president and faculty may be decided in effect, but, after all, the main characteristics of this element in human training must depend upon the public sentiment of the students. They should never be able to get away from the thought that teachers, servants of a critical public, should stand as models in character, purpose, and ideals for those types of ambition, application, and manhood which are essential to the improvement and proper development of American citizenship.

NORMAL-SCHOOL ADMINISTRATION

The management of a state normal school is governed by the legislation of its board of trustees, which is authorized by law to make such regulations as the work and the needs of the institution require. The successful administration of such an organization depends upon the proper defining of the exact province of each individual officer whose authority and power interfere with the conduct of the work. It takes considerate discretion in the management so to divide the responsibility that each officer becomes a useful and co-operative member of the administrative body, and has also the opportunity to employ his influence, authority, and ability to such an extent as to make his services economical as to effort and efficient as to results. To this end it is deemed expedient and essential to define the chief executive departments of the school administration, whose harmonious co-operation is necessarily essential to the proper conduct of the school.

I. *The board of trustees.*—At the original organization of the school the official province of the board of trustees includes all the power that is to be permanently assumed by it or temporarily delegated to others.

Prudent management on its part will insure that it will delegate everything that is possible to the president and the faculty, without surrendering its responsibility conferred by law. The real function of the board of trustees is to give specific, authoritative attention to the financial and business management, so as to prevent undue extravagance or unnecessary loss, and general supervisory attention to all professional management, the original conduct of which has been properly conferred upon the president and the faculty. It is the function of the board of trustees to know the plans of the internal management, and to comprehend the aims and principles involved, so that it can be helpful in advancing the interests by moral support and sympathy ; but the power to be exercised should be one of investigation, discussion, and suggestion, rather than one of construction, definition, and decision. A faculty is greatly hampered when the board of trustees does not delegate the entire professional management to the wisdom and discretion of those that have been selected as experts and administrators, as it is not able to use its experience or its judgment in directing the internal affairs of the school.

The most important duty of the board of trustees is the selection of a president. He should be so qualified personally as to character, experience in the work, and breadth of view as to the problems involved that the next duty of the board is to give him cordial support and hearty co-operation in his arduous executive duties. He should, therefore, hold the official relation to the board of chief executive officer, being its professional advisor and director in all that pertains to the development and the internal management of the work in progress. To this end the president should be required to attend all board meetings and have a seat in the board, with the privilege of the discussion of all problems under consideration.

II. *The president.*—The success of the administrative work of the school depends very largely upon the executive ability and fairness of the president. He should be a man of such judicial mind that he is capable of seeing consequences of policies and results of action, and deems this his chief function, rather than the supervision of details and the policies and plans of department work. He should be specially notable for his ability to eliminate personal prejudice from his official duties, and thus possess the ability to secure the hearty co-operation of associates thru sympathetic helpfulness and sensible advice. His ability to manage and direct others, without belittling their province of usefulness or arousing their opposition, is a magic power of vital importance. His relations with the board of trustees, faculty, and students should be such as to give him the maximum of influence with the minimum of personal attention or effort, while the spirit of fairness and consideration that is about his every day's work should win confidence, inspire sympathy, and insure real co-operation in everything important or essential.

He should be granted the authority, as chief executive officer, to select and nominate all members of the faculty, subject to the approval of the board of trustees. His chief aim should be to choose persons of such capability that their becoming members of the faculty would lighten, rather than increase, the burdens of administration, as they should be competent to show such discretion and prudence in the management of their part of the assigned work that their superiors in office are thereby relieved and rendered capable of a broader and more positive service.

He should occupy such official relations to all departments of the school that he may thereby be able to secure harmony in the entire administration in all essential respects, and have progress and development as the fruits of effort. His supervision should be authoritative, yet general, but so generous-spirited and so naturally helpful that all realize that they are benefited by consultation and co-operation.

He must be willing to assume the official responsibility for the conduct of the work in all important particulars, and also be willing to share the credit for the success secured with his associates who have been his faithful co-laborers. He should be worthy to befully depended upon as to policies and procedure, even where there are reasons for difference of opinion as regards the work in progress. Good executive management always produces harmony, not discord; confidence, not distrust; unity of effort, not uncertainty of purpose. It secures the best endeavors without urgency or argument, preserves unanimity without seeming externally to emphasize it, establishes a lasting sympathy between student and faculty by true diplomacy, and emphasizes the best things thru a practical exposition of them in the daily conduct of affairs.

Leadership in such a field exacts: (1) the unusual in personality, capability, power, and character; (2) ability to do work with readiness and thoroness; (3) reliability in all transactions which touch the individual rights of all concerned; (4) diplomacy in manner, language, and method, so as to secure what is needed without hostility or opposition; and (5) a spirit of helpfulness and sincerity that insures growth and inspires confidence in the co-workers.

III. *The faculty.*

1. The faculty must be a unit in all administrative affairs, so that the work done may not be disintegrated by diversity of spirit or of action.

2. Each member of the faculty should have his definite part of the work, so that he shall share in the responsibility according to his experience and ability, and thus render the management as easy and successful as possible.

3. To simplify the general management, all department business should be transacted with the members in charge of said department, subject only to the general regulations adopted by the faculty, and to

such necessary modifications as the president may be occasionally compelled to make in adjusting individual cases.

4. To further simplify and render possible the reasonable dispatch of executive business, the faculty should be subdivided by the president into certain standing committees with certain definite powers, said committees to be allowed to remain in organization as nearly permanently as possible from year to year, and thus be intrusted to manage at discretion the assigned business, subject to such instructions in general as the faculty may decide upon, and to such modifications by the president in individual cases as may in his judgment be fair, just, and reasonable to protect all interests.

5. General faculty meetings for the purpose of transacting the regular business of the school in committee of the whole, except in matters of general interest, are not conducive to securing the best interests of the school, waste the time in minor and unimportant matters, and use energy and time that could be more profitably employed in the actual improvement of the school.

6. It is profitable to have faculty meetings at regular stated intervals, at which time the fundamental problems of normal schools and the best methods of conducting the work in hand, as well as the real objects and aims of teacher-training, should be freely discussed and thoroly examined. Such meetings harmonize interests, provoke sympathy, and awaken a genuine spirit of emulation and of desire for improvement.

7. To enable the members of the faculty to do the kind and character of work needed, as well as to insure in them the best possible attitude toward the work, the maximum amount of class-room work required should not exceed twenty class hours per week, and it would be much better for all interests concerned if the maximum amount was placed at fifteen class hours per week. The overworking of teachers, as is common in normal schools, on the theory that the more hours required in the class-room, the more economical the management, is contrary to business judgment or common-sense, and always depreciates the character of the work where practiced. There are many other duties that each teacher owes his students and his work besides hearing class recitations, and not until this is recognized and the teacher allowed to be more of a personal and social factor in a school is more than half of the necessary work that ought to be done for the student actually accomplished.

IV. *The student.*

1. The student has his share of the responsibility in assisting to make the administrative work as successful as possible, for thereby he is much more able to get out of the school and the teachers the training and instruction which he needs.

2. To the student body can be left many things that frequently are

transacted by the faculty, the president, and the board. Students who are to become administrators and executives themselves must begin to practice in the school they attend the tenets of self-government and direction.

3. The student body can co-operate with the faculty in developing a better spirit in the school — that spirit which is essential to growth, to development, and to progress; and the aim should be to encourage this self-reliance, independence, and also co-operation which is so essential when they leave the school and undertake public work.

4. The students need to be so treated that they realize that their judgment amounts to something. They can be of large social, moral, and religious benefit to each other. They can become of such importance that they know they are responsible for the tone, the tendency, and the ideals of the life of the school; and thus they occupy a province which, as individuals, insures them the preparation so necessary to the real development they should individually have.

STATE NORMAL SCHOOLS

The nineteenth century will be known as the period in which all civilized nations began to attack in earnest the problem of banishing illiteracy and making ignorance impossible. The establishment of schools by the state emphasized, as never before, the need of trained teachers to instruct the young. This need led to the creation of schools for the training of teachers.

The preparation of teachers for the elementary schools has everywhere been regarded as the special function of the state normal schools, altho, where the means were at hand, very excellent work has also been done in the preparation of teachers for high schools and academies. Some states have made provision for a general system of normal schools; others have centered their efforts upon one large institution. The latter plan has made it easier to adopt a satisfactory standard of admission, but, from the nature of the case, it has failed to supply teachers in sufficient numbers for all the rural schools. The states with a system of normal schools have thus far not succeeded in furnishing an adequate supply of teachers trained at normal schools. New York has gone farthest in the direction of requiring candidates to avail themselves of professional training.

Chapter 1031, Laws of 1895, contains an act to encourage and to promote the professional training of teachers which deserves to be quoted in full as showing the advanced ground taken by the legislature of that state:

Section 1. The board of education or the public-school authorities of any city, except the city of New York, or any village employing a superintendent of schools, may establish, maintain, direct, and control one or more schools or classes for the professional instruction and training of teachers in the principles of education and in the method of instruction for not less than thirty-eight weeks in each school year.

Sec. 2. Toward the maintenance and support of these schools and classes established pursuant to this act, or heretofore established and maintained for similar purposes, and whose requirements for admission and whose course of studies are made with the approval of the state superintendent of public instruction, and under whose direction such classes shall be conducted, the said superintendent is hereby authorized and directed in each year to set apart, to apportion, and pay from the free school fund one dollar for each week of instruction of each pupil; provided, however, that said apportionment and payment shall not exceed in the aggregate one hundred thousand dollars in each year. Such apportionment and payment shall be made upon the report of the local superintendent of schools filed with the state superintendent of public instruction, who shall draw his warrant upon the state treasurer for the amount apportioned.

Sec. 3. If the total sum to be apportioned and to be paid, as provided by section two of this act, shall in any year exceed the said sum of one hundred thousand dollars, the said state superintendent of public instruction shall apportion to each school and class its *pro rata* of said sum, upon the basis prescribed in section two of this act.

Sec. 4. After January first, eighteen hundred and ninety-seven, no person shall be employed or licensed to teach in the primary or grammar schools of any city authorized by law to employ a superintendent of schools, who has not had successful experience in teaching for at least three years, or, in lieu thereof, has not completed a three-years' course in, and graduated from, a high school or academy having a course of study of not less than three years, approved by the state superintendent of public instruction, or from some institution of learning of equal or higher rank, approved by the same authority, and who, subsequently to such graduation, has not graduated from a school or class for the professional training of teachers, having a course of study of not less than thirty-eight weeks, approved by the state superintendent of public instruction. Nothing in this act shall be construed to restrict any board of education of any city from requiring such additional qualifications of teachers as said board may determine; nor shall the provisions of this act preclude the board of education of any city or village from accepting the diploma of any state normal and training school of the state of New York, or a state certificate obtained on examination as an equivalent for the preparation of scholarship and professional training herein required.

In 1897 the law was amended so as to remove the phrase, "except the city of New York."

CONTROL AND MAINTENANCE

With reference to the control and maintenance of the state normal schools the following conclusions have been reached:

1. That, as a rule, the external affairs of the state normal schools are under the control and management of a board of trustees, usually appointed by the governor and confirmed by the senate.

2. That there is a general unanimity among state superintendents and presidents of the normal schools that the plan is good.

3. That, in addition to the external control of affairs, the trustees select the teachers, and delegate to the faculty or its head the powers that must be exercised by those having the internal control.

4. That usually the wishes of the president are consulted in the selection of his colleagues. If this right is not accorded to him, either tacitly or by statute, there is constant danger of discord and friction in the faculty.

5. That, to increase the efficiency of control and management, more money, less politics, limitation of the power of local trustees, the vesting of greater power in the head of the faculty, and the raising of the standard of admission, are necessary.

DETAILS OF CONTROL

The following particulars relating to the control of normal-schools, have been obtained by correspondence with leading educators in the several states, and may be regarded as typical of the state normal-school systems in the United States. The exact language of the person giving the information has been used as far as possible.

In California each state school has a local board of five members, appointed by the governor. There is also a joint board, composed of the presidents of the several normal schools, the presidents of the boards, and two elective members from each board. This joint board formulates the courses of study, altho much freedom is left to the management of each school. The local board directs the expenditure of money for its school. Appropriations are made for each school separately.

The State Normal School of Colorado is controlled by a board of seven trustees; six are appointed by the governor and confirmed by the senate. Every two years he appoints two. The state superintendent is a member of the board *ex officio*. These trustees have entire control of the school under the law. The law does not limit them in any way.

There are at present four normal schools in Illinois, two of which are in operation. Each school has its own board. A fifth school was provided for at the last session of the general assembly, and it will have its own board. All authority in the management of the institutions is put into the hands of their boards. Each institution gets a biennial appropriation from the general assembly.

The members of the board of regents of the State Normal School at Emporia, Kan., are appointed by the governor, subject to the approval of the state senate. They hold office for four years, one-half of the board being appointed every two years. They formulate courses of study, elect teachers, and fix their salaries. The last biennium, however, the legislature took it in hand to fix salaries, but the plan was abandoned by the legislature making appropriations for the coming two years.

The Maryland State Normal School (there is but one) is governed and controlled by the state board of education, whose members are *ex officio* the trustees of the school. Said board formulates the courses of study

(usually great respect is paid to the recommendation of the principal, who is a member of the board). The board appoints all the teachers, and also directs how the annual revenues are expended. The principal is the secretary and treasurer of the board.

In Massachusetts "the general management of the several state normal schools shall be vested in the board of education, and moneys appropriated for their maintenance may be expended under its direction" (chap. 41, p. 12, Public Statutes). "The boarding houses of the state normal schools shall be under the general management of the state board of education" (*ibid.*, chap. 384, 1891). The board has entire control of the state normal schools.

The normal schools of Minnesota are governed and controlled by a special board of nine members, of which the secretary is the state superintendent of public instruction. This board formulates the course of study, appoints the teachers, and directs how the annual revenues are to be expended. Four members of this board reside in the several cities where the normal schools are located, and these resident directors, together with the presidents of the schools, manage the several schools, subject to the general directions of the normal board. The nomination of teachers is in the hands of the presidents of the schools.

The normal schools of the state of Missouri are governed by boards of regents, holding office each for six years, appointed by the governor and approved by the senate. There are three state normal schools, and each has its board of regents. The course of study, appointment of teachers, direction of the annual revenue, are wholly in the hands of these respective boards of regents. The state board of education is merely nominal. The state superintendent of education is a member, *ex officio*, of each of these boards, with power to vote.

The law creating the State Normal School of Nebraska (there is but one up to this date) created a board of education for its control and management. This board of education is composed of seven persons — two of them members *ex officio*, and the other five appointed by the governor. The two are the superintendent of public instruction for the state and the state treasurer. The five are appointed by the governor — one each year for five years.

The faculty formulates the courses of study, and the same is submitted to the board of education. The board of education appoints the teachers. The manner in which the appropriations are spent is left, very largely, to the president, under the general direction of the board.

The governor of New Jersey appoints the state board of education, which consists of sixteen men, two from each congressional district, representing different political parties. This board of education governs the state normal school.

The normal schools of New York state are governed and controlled

by a local board of trustees, who are appointed by the state superintendent of public instruction and hold their positions for life, unless they resign or are removed for cause by the joint action of the state superintendent and the chancellor of the university.

These boards have local supervision of the schools, subject to the direction and approval of the state superintendent. They select and nominate teachers subject to his approval, and he fixes the salary.

The revenues, which are appropriations from state funds by the legislature, and receipts from tuition in certain departments of the schools, are expended by the local boards, subject to the approval of the state superintendent.

At the end of each school year the local boards make a detailed report of all receipts and expenditures to the legislature thru the state superintendent. This report is made directly to him, and he incorporates it into his annual report to the legislature.

The normal-school policy of Pennsylvania is in many respects unique. By law a school must have a faculty of six professors, accommodations for three hundred boarders, and a chapel seating a thousand adults, before it can be recognized as a state normal school. On applying for recognition the school is inspected by a committee appointed by the state superintendent, and if the requirements of the law have been fulfilled, the school is officially recognized, and legislative appropriations are made, partly to assist the students in paying their tuition, and partly to complete the equipment or liquidate any indebtedness which may be resting upon the buildings. The law places the business management in the hands of a board of trustees of eighteen citizens, six of whom are appointed by the state superintendent for a period of three years (two each year), and twelve are elected by the contributors for a term of three years (four each year). The quarrels and lawsuits which have grown out of these elections show conclusively that the plan should be rejected by new states in organizing a system of state normal schools.

The courses of study are fixed by the convention of normal-school principals, and are subject to approval by the state superintendent. In order to graduate the students must pass a final examination before a board appointed (for each school) by the state superintendent, consisting of himself or deputy, two normal-school principals, of whom the principal where the students are to be examined shall be one, and not less than two nor more than six county, city, borough, or township superintendents of schools.

The rates of boarding and tuition are subject to the approval of the state superintendent, but he has no voice in the appointment or selection of members of the faculty or in the fixing of their salaries.

There is but one normal school in Rhode Island. It is governed by a board of trustees. Its functions are separate from those of the board of

education, altho the membership is nearly identical. The course of study and practice is recommended by the principal and indorsed by the board. The committee on qualifications and the board of trustees appoint principal and teachers. In practice the principal is consulted.

The revenues are expended thru the board, the auditor approving the accounts. Practically, however, there is much freedom of action for the principal.

All the state educational institutions in South Dakota are governed and controlled immediately by a board of regents of education, created and empowered by the state constitution. They have all the usual powers of such boards in any state. They have the same control over the normal schools that they have over the State University, Agricultural College, and the School of Mines.

This board of regents of education formulates the course of study upon the recommendation of the faculty or president, tho this recommendation is not required; appoints all teachers and officers or employés, and fixes their salaries; directs the expenditure of all revenues from whatever source — state appropriations, endowment land fund, and "local fund." The latter is from tuition, dormitory fees, etc.

The board is directed in its duty by statute, tho the general powers are "legislated" in the constitution.

The board now consists of five members only, but may by law be increased to nine. There are five educational institutions — two normal schools. The board appoints a committee for each. The chairman of this committee is granted limited powers, and may authorize special minor expenditures. The whole board meets two or three times a year at each institution, and oftener when important building operations are in progress.

The board grants all degrees and diplomas, upon the recommendation of the faculties.

The state treasurer holds all money, and the accounts are audited by the regents, and then by the state auditor, and paid by his warrant.

The seven normal schools of Wisconsin are controlled by a board of ten regents. The board of regents is supposed to formulate the course of study and appoint the teachers, altho these two functions of the board are administered by the presidents of the schools as a matter of fact. The board, however, determines how the annual revenues are to be expended.

MAINTENANCE OF STATE NORMAL SCHOOLS

The manner of supporting the faculty of a state normal school is a matter of prime importance. If the schools are dependent upon an annual or biennial appropriation, there is more or less danger of shipwreck, as often as a so-called reform wave sweeps over the state. This crisis, in the

history of the state normal schools of New York, was met by the heroic rally of friends who temporarily supplied the means for carrying forward the instruction during the interim. The Pennsylvania system, by which each student pays tuition, lifts the schools somewhat above the whim and caprices of political combinations, but it is hard upon those who prepare for teaching. By reason of a large attendance and careful management some of these schools have shown a tempting cash balance in the treasury at the end of the year. This has never been distributed as dividend among the so-called stockholders, but has always been put back into the school in the shape of improvements, sometimes in the purchase of additional ground or in the erection of additional buildings. The plan of requiring the students to aid in the erection of buildings can only be excused on the ground of imperative necessity, and is only less deserving of criticism than the policy of the private normal schools whose owners have grown rich on the fees paid by those who are to be educated as teachers.

The necessity for these state normal schools is so generally acknowledged that for a number of years the legislatures of the various states have been quite liberal in their appropriations. An inquiry has elicited the following interesting statistical replies:

Alabama has eight state institutions (three for colored and five for white), furnishing technical education to more than four thousand students, at a cost annually to the state of about $49,000. The sum of $164,285 was expended for the maintenance of these schools. The Fifty-fifth Congress of the United States passed a bill granting 25,000 acres of land each to the Tuskegee and Montevallo schools.

Arizona has one normal school in operation. It is supported entirely by a territorial tax, which has amounted to about $10,000 per year during each of the past five years.

Arkansas has a normal department in connection with the Arkansas Industrial University, having one teacher in charge, whose salary is $2,000; and a branch normal at Pine Bluff for colored teachers, for which there is an annual appropriation of about $5,000.

In *California* state appropriations have been made for the support and maintenance of state normal schools as follows:

State normal schools at:	For the fiscal year ending June 30: 1895	1896	1897	1898	1899
San José	$74,000	$45,000	$45,000	$53,700	$53,750
Los Angeles	30,000	41,000	41,000	52,750	52,750
Chico	24,500	53,250	23,250	30,000	30,000

For the State Normal School at San Diego, established by law March 13, 1897, the sum of $50,000 was at that time appropriated for construction, and maintenance to cover the period between that date and July 1, 1899.

The state normal schools are supported by direct appropriations made by the state legislature.

The *Colorado* Normal School has been supported by a tax of one-sixth mill on the state assessment ever since it opened. This millage has averaged, for the nine years it has been running, $35,000 a year. The last legislature raised this millage from one-sixth to one-fifth mill on the assessment. In round numbers the assessment will be, under the new law, $200,000,000. The one-fifth mill tax is expected to realize about $40,000 a year.

From time to time the school has received special appropriations.

In 1890–91 it received		$20,000	special
" 1892–93	"	35,000	"
" 1894–95	"	10,000	"
" 1898–99	"	25,000	"

Connecticut has three normal schools. The appropriations by the legislature during the last five years are as follows:

	Maintenance	Buildings
1894	$60,000	$71,880.39
1895	60,000	48,974.42
1896	60,000	34,070.96
1897	60,000	26,206.75
1898	60,000	1,650.96

The normal schools have never received anything from land grants made by the United States government.

In *Florida* there are two state normal schools (one for each race) supported by state appropriations. The one for whites, at De Funiak Springs, receives $6,000 a year, and the one for negroes, located at Tallahassee, receives an average appropriation of about $3,000, besides one-half of the Morrill Bill Fund, which has been increasing $500 per year until the present year, when it reaches the maximum of $12,500.

Georgia has two state normal schools. For the last four years they have received an appropriation of $22,900 each. For the next two years the appropriation will be $20,400 each.

There are in *Illinois* two normal schools in operation, and two more will probably be opened in September, 1899. The last general assembly passed an act authorizing the establishment of a fifth normal school, known as the Western Illinois Normal. The building will probably be completed within the next two years.

For the school years 1893 and 1894 there was appropriated for current expenses of the Illinois State Normal University, each year, $31,493.56; for each year of 1895 and 1896, $35,000; and for each year of 1897 and 1898, $35,000; for the year 1895 there was appropriated for a gymnasium building $40,000, and in 1897, for the completion of the gymnasium building, $10,000. For the two years beginning July 1, 1899, the appropriation for each year is $39,493.56, and there is an additional appropriation of $5,300 for repairs.

For each year of 1893 and 1894, for the Southern Illinois Normal University for current expenses, $22,116.44; for each year of 1895 and 1896, $22,116.44; and for 1897 and 1898, each year, $23,826.44; for library and museum building, for 1895, $40,000, and in 1897, for completing the library and gymnasium building, $6,000.

Of the amount appropriated for these institutions for current expenses about $6,500 came each year from the College and Seminary Fund. Except this, they have received no support from land grants made by the United States government.

In 1895 the Northern Illinois Normal School received for building purposes $50,000, and the Eastern Illinois Normal School for the same purposes, $50,000; and in 1897 these institutions received each $50,000 for building purposes. The two normal schools received from the last general assembly $33,000 each for regular expenses, and for completing and equipping the Northern Normal a special appropriation of $98,339, and for the Eastern Illinois Normal a special appropriation of $46,000.

Indiana has one state normal school, which, under the act of 1895, receives about $65,000 each year. Previous to that time the normal school received about $30,000 annually.

Iowa has but one state normal school. The following table shows the amount of expenses for building, support, and contingent expenses for the biennial fiscal terms ending:

June 30, 1889	$40,550.00	June 30, 1895	$68,125.00
June 30, 1891	37,508.31	June 30, 1897	97,325.00
June 30, 1893	58,791.69		

The school is supported by permanent and temporary appropriations as follows:

I. Permanent appropriations — not needing legislative action to continue:	
1. Teachers' fund annual	$28,500
2. Contingent fund annual	9,000
3. Tuitions, students covering all contingencies and laboratory fees	16,500
Total permanent support	$54,000
II. Temporary appropriations made by last assembly, annual	7,000
Total annual support	$61,000

Buildings, $120,000; grounds, $10,000; water plant, $10,000; equipment, $30,000.

The revenues of the State Normal School at Emporia, *Kansas*, are derived from three sources:

1. From appropriations by the legislature.
2. From income on the endowment fund, which now brings about $13,500 per year.
3. From fees from model-school and special pupils, making about $3,000 per year.

The income from interest on endowment fund, fees, and the appropriations by the legislature approximates as follows:

For the year ending June 30, 1895	$40,000
" " " " 1896	44,250
" " " " 1897	44,000
" " " " 1898	45,000
" " " " 1900	72,000 [1]
" " " " 1901	51,500

Kentucky has two state normal schools, one for the preparation of white and one for the preparation of colored teachers. During the past five years the state has paid to the former $190,495.74, or an average each year of $38,099.15. During the same period this institution has received from the national government $98,422.25, or an annual average appropriation of $19,684.45, its average yearly income from both sources having been $57,783.60. During the last five years the latter has received from the state $27,173.15, or an annual average of $5,434.63, and from the national government $15,945, an average yearly appropriation of $3,189; total average from both sources, $8,623.63.

Louisiana has one state normal school. The new state constitution requires the legislature to appropriate annually for its support not less than $15,000 a year. In addition to this the legislature has given yearly varying sums for buildings, etc. The appropriation in 1898 was:

For the year ending January 30, 1899	$16,000
Repairs	6,500

Maine has three normal schools, and a special training school in her territory, occupied by French-speaking citizens.

The state appropriates annually for current expenses $9,000 for each normal school and $4,000 for the training school.

Special appropriations:

	Farmington	Castine	Gorham	Fort Kent
1895–96	$20,000	$3,500	$15,000	$2,100
1897–98	20,000	3,500	33,500	2,500
1899–1900	700	700	700	500

There is but one state normal school in *Maryland*. The legislative appropriation for its support during each of the last five years, prior to 1898, was $10,500. The legislature of 1898 increased its annual appropriation to $20,000. It is allowed by law to receive one pay student, at $50 per annum, for every two students holding free scholarships by appointments of the school boards of the several counties of the state and Baltimore city. From this source from $7,000 to $8,000 per annum are received. It is strictly a state school. The building, furniture, apparatus, etc., are the property of the state, and it is entirely controlled by the state board of education, who are *ex officio* the trustees of the school.

[1] Of this amount $19,000 is for buildings.

There is also a normal school for colored students, which was established by private donations, and to which the state makes an annual appropriation of $2,000, but it is not owned or controlled by the state.

The last legislature (1898) appropriated $20,000 to build another state normal-school building, and $5,000 per annum for its support. This will be built during the present year and will be under the control of the state board of education.

Massachusetts :

STATE NORMAL SCHOOLS

	1894	1895	1896	1897	1898
State appropriation for current expenses	$128,500	$143,858	$171,832	$217,056	$266,527
Amount apportioned to each normal school:					
Bridgewater	31,697	32,948	35,813	37,699	40,052
Fitchburg	.....	5,966	19,532	32,030	35,344
Framingham	22,618	22,217	22,229	22,230	24,499
Hyannis	.....	.....	.....	9,123	22,474
Lowell	.....	.....	.....	11,999	25,713
North Adams	.....	.....	6,000	13,797	24,934
Salem	16,098	21,944	24,815	26,870	25,024
Westfield	22,066	23,123	23,736	22,992	24,989
Worcester	17,549	18,749	19,974	20,524	21,449
Normal Art, Boston	18,500	18,790	19,790	19,780	22,050

In addition to appropriation for current expenses, sums have been appropriated by the state legislature as follows :

1894.	Bridgewater	$75,000	Addition to building.
	Framingham	1,000	Sanitary improvements.
	Fitchburg	75,000	New normal-school building.
	Hyannis	75,000	New normal-school building.
	Lowell	75,000	New normal-school building.
	North Adams	75,000	New normal-school building.
	Total	$376,000	
1895.	Bridgewater	$59,000	Additional buildings, etc.
	Fitchburg	25,000	New normal schools.
	Hyannis	25,000	New normal schools.
	Lowell	50,000	New normal schools.
	North Adams	25,000	New normal schools.
	Worcester	15,000	Gymnasium.
	Worcester	20,000	Repairs.
	Total	$219,000	
1896.	Framingham	$31,000	Improvements.
	Salem	25,000	New building.
	Worcester	10,000	Completing and furnishing gymnasium.
	Fitchburg	25,000	Grading grounds, furnishing and finishing for occupancy.
	Hyannis	25,000	Same purpose as Fitchburg app.
	Lowell	50,000	Same purpose as Fitchburg app.
	North Adams	25,000	Same purpose as Fitchburg app.
	Salem	43,000	Same purpose as Fitchburg app.
	Total	$234,000	
1897.	Bridgewater	$12,888	Repairs and improvement.
	Fitchburg	17,000	Equipment, etc.
	Hyannis	7,000	Additional land.
	Lowell	20,000	Completing and furnishing.
	North Adams	15,000	Equipment, etc.
	Total	$71,888	
1898.	Lowell	$2,000	Building sidewalks, etc.
	North Adams	1,500	Purchase of additional land.
	Normal Art, Boston	35,000	Erection of annex.
	Total	$38,500	

The State Normal College at Ypsilanti, *Michigan*, has support as follows:

For the two years	State appropriations	Other sources
1889–90	$ 84,700	$20,471.80
1891–92	99,520	23,037.97
1893–94	120,220	23,147.37
1895–96	116,900	23,000.73
1897–98	134,800	26,273.94

Michigan has another normal school at Mt. Pleasant, called the Central State Normal School, which has received almost $25,000 per year for four years — $29,000 in 1897.

The state legislature of *Minnesota*, in the last five years, appropriated for the current expenses of the state normal schools as follows:

	Winona	Mankato	St. Cloud	Moorehead
1894–95	$24,000	$24,000	$22,000	$15,000
1895–96	26,000	26,000	24,000	15,000
1896–97	26,000	26,000	24,000	16,000
1897–98	37,000	37,000	26,000	18,000
1898–99	37,000	37,000	26,000	18,000

Eight thousand dollars of the $37,000 appropriated for Winona and Mankato in 1898 was for continuous (all-summer) sessions. The state normal schools of Minnesota receive no part of their support from land grants made by the United States government.

Missouri has three state normal schools for white teachers and one for colored teachers. The legislature makes biennial appropriations for these schools. In 1895 there was appropriated for these four schools, for maintenance during the years 1895–96, $114,750. In 1897 the legislature appropriated for these four schools, for maintenance during the years 1897–98, $127,830.

Nebraska has but one state normal school, located in the extreme southeastern portion of the state. The state superintendent thinks that there has been much prejudice against making a reasonable appropriation for the school because of its location, and that the state needs at least two more state normal schools. To the one now in existence the appropriation for the biennium 1895–96 was $48,296.89, and for the biennium 1897–98 it was $73,815.01.

Nevada has no separate normal institution, but the normal school is a branch of the State University; there is no separate fund appropriated for its maintenance.

Part of the support of the university comes from land grants, and part is appropriated by the legislature from the general fund.

New Hampshire has one state normal school, for the support of which the sum of $10,000 is annually appropriated. This year there is an extra appropriation of $8,000 for a new heating plant.

There is but one state normal school in *New Jersey*. It is located at Trenton.

The legislature makes an annual appropriation, according to the estimated needs of the school:

For		For	
1894–95	$35,000	1897–98	$42,000
1895–96	35,000	1898–99	45,000
1896–97	40,000		

This fund is supplemented by the tuition fees from the Model School, which have averaged $25,000 annually for the past five years.

New York has eleven normal schools and one normal college. The amount expended for these schools for the last five years is as follows:

	1894	1895	1896	1897	1898
Albany Normal College	$34,361.59	$34,505.65	$35,985.20	$51,242.26	$55,179.58
Brockport	21,948.20	27,966.49	43,558.14	26,711.63	37,220.54
Buffalo	39,596.80	24,139.65	26,743.31	28,336.01	38,631.39
Cortland	25,253.72	35,614.29	37,786.13	31,261.58	31,774.57
Fredonia	27,589.82	31,948.66	24,791.90	25,880.39	25,136.97
Geneseo	30,257.69	26,45.120	95,734.04	42,402.61	34,217.86
Jamaica	.....	.....	.....	.....	70,763,80

	1894	1895	1896	1897	1898
New Platz	$22,320.99	$ 20,989.66	$21,114.87	$22,066.26	$23,679.53
Oneonta	79,674.51	166,355.18	63,860.21	27,978.68	25,000.00
Oswego	22,686.20	34,415.50	31,317.29	28,698.17	27,437.50
Plattsburg	22,859.75	24,290.37	73,212.47	37,377.23	23,789.07
Potsdam	25,641.06	31,931.65	27,721.85	31,308.75	27,843.05

The school at Jamaica was recently established, hence it is possible to give figures for the last year only. The ordinary expenses of running these schools vary from $22,000 to $35,000 per year. In the above table, wherever the amounts in any one year exceed the figures given, it indicates that an extra amount has been expended for repairs or new buildings.

North Dakota has two regularly established normal schools, besides the normal department at the State University. It appropriates for the support of the schools about $50,000 for the biennial period. A land grant of 80,000 acres was made for normal schools by the federal government, and a small amount is received each year from the rental of these lands.

Ohio has no state normal schools, but her state universities maintain departments of pedagogy. Sections 3951 and 3951*a*, R. S., provide for the levying of funds for the state institutions. There is levied upon the grand duplicate of Ohio for the Ohio State University $\frac{1}{10}$ of 1 mill; for the Ohio and Miami Universities, $\frac{8}{100}$ of a mill, to be divided, $\frac{5}{12}$ for Miami and $\frac{7}{12}$ for the Ohio University.

In addition to these, there is $\frac{1}{100}$ of a mill levied for the colored school, Wilberforce University, near Xenia.

The territory of *Oklahoma* has supported one normal school for nine years, and two since September, 1897. The last legislature made a levy and an appropriation aggregating about twenty-five thousand dollars per annum for each of these institutions. These institutions are each to receive five or six thousand dollars per annum. The amount is to be paid out of the rentals derived from the thirteenth section in each township of what is known as the Cherokee Strip.

Oregon has five state normal schools. There have been no land grants from the United States government, and the legislative appropriations, from January 1, 1893, to December 31, 1900, have been as follows: Monmouth, $98,408.76; Weston, $73,500; Lakeview, $5,000; Drain, $7,500; Ashland, $7,500. Total, $191,908.76.

Pennsylvania has been making an annual appropriation of $130,000 in aid of students preparing to teach who are in attendance at the state normal schools, and an equal sum for maintenance, which was equally divided among the thirteen schools recognized as state normal schools. On the latter amount, the schools, by arrangement with the governor, accepted for the last two years a reduction of 25 per cent., in view of the diminished revenues of the state. No extra appropriations for buildings have been made in the last five years. For each of the two years beginning June, 1899, the legislature made the usual appropriation of $130,000 to the state normal schools, and a like amount to aid students preparing to teach; but the appropriation in aid of students for the year 1900–1901 was vetoed by the governor, on account of a probable shortage of funds in the state treasury.

Within the past four years *Rhode Island* erected near its state capitol a new building or its state normal school. Over $500,000 was expended for the land, building, and equipment of the new school. The appropriation for the current year is $54,000.

The money received by Winthrop Normal and Industrial College from the state of *South Carolina* for the scholastic year of 1897–98 is as follows:

Scholarship appropriation	$ 5,456
Regular appropriation (1897)	13,000
Regular appropriation (1898)	17,500
Appropriation for sewerage	3,000
Total (appropriated for one year)	$38,956

The amount appropriated to the Colored Normal and Industrial College in February, 1899, for the ensuing scholastic year, is $15,000.

South Dakota has three state normal schools under state control, but the legislature has made appropriations for only two of them, one being supported almost entirely by tuition from the pupils; a small amount being received from interest on money derived from the sale and rent of school lands.

The following amounts were appropriated by the legislature for the different years designated and for the schools mentioned above:

	1891	1892	1893	1894	1895	1896	1897	1898
Madison - -	$ 9,300	$ 9,300	$16,050	$12,250	$12,500	$12,500	$12,900	$12,900
Spearfish -	10,700	10,700	13,350	13,050	13,500	12,500	13,200	13,000

Tennessee appropriates $20,000 per annum to the Peabody Normal College.

The annual appropriation for the support of the *Texas* Normal Institute made by the state was $39,500. It gets no endowment, and is entirely dependent upon legislative appropriations. It is the only Texas state normal school for white teachers. The Prairie View Normal is established by the state for colored teachers. It is probable that the present legislature will establish an additional normal school.

Utah has but one normal school, which is a department, in fact, of the state university. It has a branch at Cedar City, in the southern part of the state. While this normal school or department receives indirectly material aid from the legislature in its biennial appropriations to the University of Utah, the amount is not segregated from the general appropriation to the university. This department, in much of its work, is so intimately connected with the other departments of the university that the same professor may have students in his classes from several different departments in the institution. The normal work is specialized in a few branches only, as pedagogy, educational psychology, etc.

The only land grant the normal school, as it is called, has received from the United States government is that of 100,000 acres, made on the admission of the state into the union, in 1896. These lands have not yet been a source of revenue to the department. It has also participated, as an element of the university, in what little benefit that institution has received from its land grants — 46,080 acres by act of Congress, February 21, 1855, and 110,000 acres by act of Congress, July 16, 1894.

There are other normal schools in the state, but they are of a private or denominational character.

Vermont maintains three state normal schools. The appropriation to each is $5,000, with $1,000 additional to each for supplies and appliances.

The legislature of *Virginia* appropriates annually $45,000 for the support of the state normal schools, of which amount the State Female Normal School for whites gets $15,000, the normal department of the College of William and Mary for white males, $15,000, and the Virginia Normal and Collegiate Institute for negroes of both sexes, $15,000.

In addition to the foregoing, the state appropriates $2,500 a year for the support of summer normal schools.

The state of *Washington* has three state normal schools. The last legislature made appropriations as follows:

State Normal School at Cheney:		
Maintenance two years	$25,000	
Library and repairs	1,400	
		$26,400
State Normal School at Ellensburg:		
Maintenance two years	$30,000	
Repairs, furniture, library, etc.	8,500	
		$38,500
State Normal School at Whatcom:		
Maintenance two years	$17,500	
Equipment of building, etc.	16,000	
		$33,500
		$98,400

West Virginia has six normal schools.

The appropriation for teachers' fund for 1898–99 was $25,200, an increase of $6,000 over the old appropriation. For 1899–1900 the appropriation is $30,000, an increase over the old appropriation of $10,800. The appropriations for the several schools are given below. Huntington gets $15,000 for additions to building, and Concord gets a large appropriation to furnish a new building. The other schools received liberal appropriations for their running expenses, and repairs and improvements.

NORMAL SCHOOLS, WHITE, INDIVIDUAL FUNDS

	1899	1900	Total
Marshall College	$9,236.21	$14,050.00	$23,286.21
Fairmont	5,883.40	6,030.00	11,913.40
West Liberty	5,580.75	2,200.00	7,780.75
Glenville	5,079.45	4,650.00	9,729.45
Concord	4,500.00	7,184.50	11,684.50
Shepherd College	3,578.00	3,050.60	6,628.00
	$33,857.81	$37,165.10	$71,022.31

Wisconsin claims to be the normal-school state *par excellence* of all the union.

The "Normal School Fund," amounting to more than $1,922,000, was derived from the sale of public lands originally granted to the state as swamp lands. This fund is invested in public stocks and bonds, and yields an annual income, at present, of nearly $100,000. Until the opening of the fifth normal school, in 1885, this was the sole income of the board, save a few thousand dollars from local tuition receipts from pupils in the model schools. But the opening of the Milwaukee school necessitated an appropriation by the legislature of $10,000 a year for its partial support. Here matters stood for eight years more. But in 1893 an upward movement began. The legislature authorized the establishment of two new normal schools, and ordained a tax for their support of one-twentieth of a mill on a dollar of the assessed valuation of the state. This enlargement of the system by the establishment of two more schools rendered still further aid necessary from the state treasury. Accordingly, the legislature of 1895, besides stated appropriations amounting to $72,500, for specified purposes, changed the one-twentieth mill tax to a one-fifth mill tax upon the assessed valuation of the state, this yielding an annual revenue of $120,000 in addition to previous income. This appropriation enabled the board to equip the schools more adequately and put salaries on a somewhat better scale. From this and other causes the schools have experienced a large increase in popularity, as evinced by membership, in the last two years, calling for enlargement of buildings and teaching force. Again appeal was made to the legislature, at its session in 1897, and a further appropriation of a one-tenth mill tax on the valuation of the state was secured. The annual revenue of the normal-school system amounts, therefore, at the present time, to nearly $300,000, of which about one-third is derived from invested funds and two-thirds from taxation. These figures afford convincing proof of the attitude of the people of Wisconsin toward its normal schools. No other state is spending a proportionate amount for the professional training of teachers. Even in these recent years of financial stringency, no one has ever proposed any other than a most liberal policy toward the educational institutions of the state.

The legislature of 1899 made a special appropriation of $70,000 for additional buildings at Stevens Point and Oshkosh, and some repairs at other schools; repealed all laws granting aid in different ways, and substituted therefor an act appropriating directly $198,000 per year, in addition to the income derived from invested funds, tuition, and other sources.

The only normal school in the state of *Wyoming* is that connected with the State University at Laramie—that is, the normal school is conducted as a department of the university.

The state appropriation for the maintenance of the State University is a tax of one-fourth of a mill on all taxable property in the state. Altho a grant of land was made by the United States for the benefit of the institution, the income from this grant has been very small, not averaging more than two hundred dollars per year.

Indirectly, the normal school received some benefit from the government appropriations for an agricultural college, the institutions being all conducted together.

APPENDIX A

PROFESSOR REIN'S PRACTICE SCHOOL, JENA, GERMANY

BY JOHN W. HALL, SUPERINTENDENT OF TRAINING DEPARTMENT, STATE NORMAL SCHOOL, GREELEY, COLO.

Professor Rein's work at Jena is along two lines — a theoretical and a practical one. The first line, the theoretical one, is carried out in the university proper, where he lectures five hours a week, usually on two different lines of pedagogy; in one semester he lectures three hours a week on general didactics, and two on empirical psychology; in another semester, two hours a week on Herbart, three on systems of pedagogy; in a third, two hours on fundamentals of philosophical ethics, three on special didactics, etc.

The second line of work, the practical, is done in the practice school, situated about a fourth of a mile from the university. The practice school consists of three classes of from twelve to fifteen boys each, from the poorer families. The boys enter usually in the first grade and continue thru the eight school years. For example, one year the classes would be the first, fourth, and sixth grades; another year they would be the second, fifth, and seventh grades; a third year they would be the third, sixth, and eighth grades. The number of classes is limited by the lack of money. Each class is in charge of a critic teacher, who devotes his whole attention to it, is present at every recitation, and does all teaching not done by the students. The teaching by the students is voluntary.

This line of work resembles that of our best normal schools, being distinguished from them by the inferiority of the equipment and the class of people from which it draws its pupils.

Perhaps the greatest distinguishing characteristic of the school is the relationship that is established between the theoretical and practical lines just mentioned. This relationship is brought about in three ways:

First, by the frequent visits of Professor Rein to the practice school — observing the work, offering friendly suggestions, frequently taking part in a recitation, and sometimes conducting an entire one — a university professor actually engaged in the teaching of children.

The second means of establishing this relationship is thru the teaching of the students in the practice school. There the student strives to realize his theory in his practice. To do this he puts himself in closest touch with his critic teacher and the class by close observation and conference. Usually much time is spent on the preparation and discussion of his plan before he is allowed to go before the class. In this way he realizes the difference between talking about a recitation plan and actually making one which will stand the test; he appreciates the difference between talking about the aim of a recitation and finding and really stating it properly; between talking about preparing the mind for the reception of the new and actually framing the questions that will do the work. The plan being satisfactory, he is permitted to take the class. He is led to see the imperfections of his recitations and to discover the causes. With this experience he prepares for

the next recitation, each recitation calling for two thoro and helpful criticisms, the one of the plan, the other of the recitation.

The third means of contact, and perhaps the most important, is the so-called *Praktikum*, or recitation for public criticism, and its criticism a few days later in what is called the *Konferenz*, to which an entire evening is devoted.

This recitation is held at the practice school, in the presence of Professor Rein, the critic teachers, and the students — sometimes numbering over sixty. It is held by a student during regular teaching or by a critic teacher, and is always one of a series — never an unrelated individual, never a show. The teacher who is to hold it is notified by Professor Rein a week in advance, and the plan is prepared with special care, for it is subject to inspection and criticism as well as the recitation itself. The chief critic is also appointed a week in advance, and begins at once to make himself thoroly acquainted with that which he is to criticise, in order to see the work in fitting perspective, and in order to distinguish between accidental mistakes and those indicating tendencies. His is a written criticism. The other students content themselves with notes on the recitation, more or less copious.

There is an interval of several days between the recitation and the *Konferenz*, in order to allow time for the careful preparation of the criticism. This criticism forms the basis for the discussion, and attention is directed to the following points :

1. A description of the recitation.
2. Criticism of —

(*a*) Subject-matter, its fitness, its relation to other subjects, and its relation to the preceding and following recitations in the same subject.

(*b*) Method : aim, movement, leading questions, tests, and summaries.

(*c*) Results.

(*d*) Government.

(*e*) Manner.

The principal criticism is preceded by the reading of the self-criticism by the practician.

In the preparation of the self-criticism it behooves the practician to keep in mind the old precept of the seminar : "Seek the error in thyself, not in the conditions, nor in the children." The actual time spent in the discussion of the practice recitation is, on the average, two hours. Here it is determined how far the practician stands from his ideals. The judgment is softened by circumstances, but the discussion is as nearly scientific as possible.

In the course of the semester such problems as the following come up time and again for discussion in these conferences : "Does the aim, as stated, fulfill the essentials of a good aim ?" "Did the preparation of the mind for the new matter really prepare ?" "Wherein was the failure ?" "Did it make use of what the children had learned in certain other subjects ?" "Is the step of preparation the proper place to emphasize correlation ?" "What formal steps were involved ?" "How ?" "Were they violated ?" "How ?" "Was sufficient interest manifested ?" "When and why was it lacking ?" The list might be continued indefinitely.

Aside from this discussion of the recitation, the outline of work for the three classes in all subjects is read from week to week in the *Konferenz*, and suggestions or objections are called for. Opportunity is given for criticism of any point in the general management, discipline, curriculum, and method, or of anything done or not done in the whole field of their practice. Professor Rein presides at the *Konferenz*, and with exceptional tact controls the discussion. Direct attacks upon any practice or phase of the school is not only allowed, but it is invited, for, in Professor Rein's own words : "We can conceive of criticism only from the standpoint of helpfulness, and as given only in aid of friends and fellow-workers. Personalities underlying criticism adjust themselves."

In this way ample provision is made for bringing together the theoretical and the practical lines of work. Of these the practical, or that done in connection with the practice school, is by far the more important. It is, in fact, the very center of the educational activity at Jena. At least this is the opinon of Professor Rein and of all Americans who have been seriously engaged there. On this point Professor Rein says: "The work of the schoolroom is, and will remain, the test for how much the educator must yet add to his inner treasures, first of knowledge, but above all of clearness, depth, and warmth of moral sentiment. Let us conceive the work of our little practice school in this spirit. We are fortunate that we have it, small and modest as it is, for here we can separate the chaff from the wheat. Here is the field for the growth of character in the teacher who is willing to lessen the distance between himself and his ideal by unceasing effort, by deeds rather than words. To him who is in earnest every criticism will be welcome, for criticism challenges self-examination and frightens one to greater safety."

What Professor Rein is striving for is, again in his words, "that each one acquire a pedagogical fundamental tendency; that it pervade his entire moral disposition; that he not only acquire such a tendency, but live it; that he shun all ostentation, and place truth above everything, even tho it often be bitter." (See article on Professor Rein's practice school in reports for the National Educational Association, 1896.)

HISTORICAL

Aside from his lecture on philosophy in the university at Königsberg, where he went in 1809, Herbart was required to lecture on pedagogics. Soon after this he established a pedagogical seminary, in connection with which was to be a practice school where scientific method might be exemplified in the teaching of twelve to fourteen boys. Students did the teaching under the closest supervision and direction of Herbart himself. The students were not obliged to follow the directions of Herbart, if they differed from him and could support their points with good reasons.

These students were to become superintendents of schools when they had finished their course. One of them, Karl Volkmar Stoy, afterward established a similar seminary and practice school at Jena, based upon Herbart's ideas, according to his own interpretation of them. Professor Stoy died in 1885. This seminary and practice school are now conducted by Professor W. Rein, who succeeded Professor Stoy. Herbart's ideas are still followed at Jena, altho the interpretation is somewhat different.

Professor Ziller conducted a similar seminary and practice school at the university at Leipzig, from about 1857 until his death in 1883, when the practice school was discontinued. Ziller's work was based upon Herbartian ideas. Professor Rein was a student and a teacher in Ziller's school, and agreed largely in his interpretation of Herbart.

APPENDIX B

GENERAL VIEW OF THE WORK OF THE NORMAL SCHOOL

BY ALBERT G. BOYDEN, BRIDGEWATER, MASS.

The function of the state normal school is to educate teachers for the schools of the state. The state supports its public schools for the education of its children. It supports the normal school that its children may have better teachers.

1. The first requisite in the discharge of its function is that the normal school shall inspire the student with the spirit of the true teacher.

Its atmosphere must be such that he will be continually breathing in this spirit. He is to consider the acquisition and use of knowledge, the exercises of the school, his own

purpose, manners, and conduct from the point of view of the teacher. It is vitally important to awaken in the normal student a just appreciation of the work of the teacher, that he must have the spirit of service, must love his work, love his pupils, feel that he has a mission which he must accomplish, and come to his pupils, as the Great Teacher comes to men, that they may have life abundantly. This end can be accomplished only by a school whose sole purpose is the education of teachers, and whose faculty is consecrated to this service.

2. The second requisite is that the normal student must be carefully led thru the educational study of the subjects of the public-school curriculum, that he may learn how to use each in the teaching process and thereby learn the method of teaching.

In the elementary and secondary school the student is a learner, seeking the knowledge of the object and the mental discipline which comes from right exertion in learning. In the normal school he is a teacher; he must think the object as the learner thinks it; he must also think the process by which the learner knows, and the means he is to use to cause the learner to take the steps of this process. For instance, the teacher is leading the learner to acquire the knowledge of a bird. The learner, directed by the teacher, is occupied in finding the parts, qualities, movements, habits of the bird. In doing this he perceives, remembers, imagines, compares, generalizes, reasons, but he does not notice these modes of activity thru which his mind moves. The teacher thinks the facts with the learner; he also must think the movement of the learner's mind, and how he shall incite him to the most effective thinking. The teacher thinks the mind to be taught into unity with the subject by which it is taught. The object of thought is used as the means to teaching. Studying a subject as a teacher is much more than studying the same subject as a learner. The study of the subject for teaching is educational study.

It is important to notice that the teaching process cannot be studied apart from the subjects which form the course of studies for the schools. As we have seen, these subjects furnish the objects of thought which must be used in teaching. It is a well-known law of mental activity that the mind proceeds from the particular and concrete to the general and abstract. We must proceed from the particular ideas of individual objects to the general idea of a class which is composed of the individual objects. We must proceed from the knowledge of many red objects to the abstract idea of redness. The same law controls the learning of the teaching process. The normal student must be led thru the learning and teaching process in each subject; he must buckle himself to the subject, and study it definitely for teaching; then teach and be criticised on his work until he has firmly grasped the process. When he has thus gone thru the study of the concrete process in the several subjects, he can compare his experiences in these several studies and find the aim, the steps, and the means of the teaching process and the general method. This is the law which governs all learning. We can acquire skill in any mechanical or mental process only by going thru the intelligent performance of the process.

No one can produce the best quality of teaching in any grade without this educational study of the subjects he is to use as instruments in the unfolding of the life of the pupil. There is no substitute for this study. The end cannot be accomplished by reading about it, by hearing lectures upon it, or by observing others do it. The separation of normal-school work into "the academic study of subjects and the study of methods" is not sound educational practice.

The teacher must have a full knowledge of each subject at his ready command. He needs to be saturated with his subject, if he would teach effectively, so that he can give his attention to the pupil's mind, put himself in full sympathy with the pupil, and be ready to use the subject as the needs of the pupil may require. The normal student must consider the subject philosophically, to know why it has its place in the course of studies. Take the subject-reading as an instance of the need of this study. What is it to be able to read an author? What is this power as a factor in life? Why should

reading be taught? What is its place in the course of studies? These questions must be answered by the teacher before he can effectively teach reading. Without this philosophical study of the subject the teacher will be formal, empirical, and fall into routine. He must consider the subject scientifically, that he may know its principles in their systematic arrangement, and to place the subject in its true relation to other subjects. The principles of the subject in their orderly arrangement are the things essential to be taught, if the pupil is to be able to use his knowledge in solving the problems of life. Without this scientific study of the subject the teacher's work will be fragmentary, will lack order, method, vitality. He must study the subject pedagogically, to know its relation to the pupil, to know what parts are to be used and emphasized in teaching, and the best method of using them. Without this pedagogical study of the subject the teacher will fail to adapt his teaching to the needs of the pupil. He needs to consider each subject from this threefold point of view. The study of one subject in this way does not enable him to use another subject in teaching without studying it in the same way. Teaching should be rational, not empirical.

The normal student should have, at the beginning of his work in the normal school, an elementary course in psychology, to indicate distinctly the principles and the method of teaching in the school; then begin at once upon the educational study of the subjects and continue it thru the curriculum.

The pupil in the elementary and secondary school has not the purpose, the attainments, or the maturity necessary for the educational study of the subject. He leaves the elementary subjects when he enters the secondary school, he takes the secondary subjects for the first time in that school, and he is far from being saturated with the subjects when he leaves the secondary school. The secondary-school courses are elective. The best graduate of the secondary school often has not taken at all some of the subjects called for in the enrichment of the elementary-school course, as recommended by the Committee of Ten and the Committee of Fifteen. Hence it not infrequently happens that some of the best students in the normal school must take their first study of a subject from the educational point of view. It is by no means certain that this is any disadvantage to the student as a teacher.

To be well equipped for teaching in the elementary schools the normal student must take the educational study of the secondary-school subjects as well as that of the elementary-school subjects. The teacher in any grade cannot do his own work properly unless he knows the relation it holds to what precedes and follows. He must know more than he teaches. Confining one's effort to any one grade is narrowing in its effect upon teacher and pupil. One cannot teach the program given by the Committee of Fifteen for the elementary schools without this study. He cannot teach the language required by this program effectively without this study of other languages than English; he cannot teach the arithmetic and elementary algebra in their proper relation to the study of higher mathematics without this study of algebra and geometry; he cannot teach geography intelligently without this study of history and the several sciences upon which geography depends; he cannot teach nature study acceptably without this study of the natural sciences; he cannot effectively use the myths and stories from ancient history now called for in the earlier grades, or make United States history a living study, without this study of general history; he cannot use the gems of literature and art without something of this study of literature and art; and to these must be added this study of drawing, vocal music, manual training, and physical culture.

There is a prevalent misconception of the true work of the normal school. It finds expression in the statement, so often made, that the so-called academic studies should be left out of the normal-school course of study, and the school should give its whole attention to strictly professional work — that is, to the study of psychology, the principles and methods of teaching, the history of education, and training in the practice school. The study of psychology may be just as academic as that of arithmetic or grammar, and when

so studied it does not meet the teacher's needs. The study of these subjects is not professional until they are studied with direct reference to the teaching process.

This view of the work of the normal school is based on the false assumption that we may supply the normal student with educational theory in the abstract, and leave him to make the application of the theory in teaching in each of the particular subjects; whereas all philosophy and experience show that theory and practice must be conjoined in the concrete teaching process. Persons equipped with educational theories may be good talkers about teaching, but they never will become good teachers under this divorce of theory and practice.

The academic studies should not be taken in the normal course for academic study, but the time will never come when we can safely dispense with the educational study of these subjects in the normal school. The normal school is to be made professional, not by the exclusion of these studies from its course, but by the inclusion of the educational study of them. All the studies of the normal school should be strictly professional, that is, studied in their direct bearing upon the teaching process, whether the course be shorter or longer, for elementary or for higher work. The one function of the normal school is the education of teachers. This function is capable of indefinite extension. All teachers, from the kindergarten thru the university, should have their professional training.

3. The third requisite is that the school should lead the normal student, after the educational study of the subjects of the school curriculum, thru the broader study of man, body and mind, to find the principles of education which are derived by this study and which underlie all true teaching. This study is invaluable for its "influence in expanding the mind, enlarging the views, elevating the aims, and strengthening the character of the student." After this study the student should be led thru a careful analysis of the art of teaching, school organization and school government, and the study of school laws, and the history of education. In this study the student is constantly referring to his experience in the educational study of subjects for illustrations to establish the general views he is now discussing.

4. The fourth requisite is that the normal student shall be led to make a practical study of children, which he should do as fully as possible thruout the course under intelligent suggestion; that he should have ample observation under intelligent guidance in all the grades of a good public school, with a first-class teacher at work in charge of each room; that he breathe the atmosphere, become familiar with the workings, and become acquainted with the children as pupils in such a school; that in the latter part of his course, when he has some just conception of the nature and method of true teaching, and when he has become acquainted with the pupils, he should have ample practice in teaching under such supervision as he needs, whether it be more or less. To put the student to teaching before this preparation is a wrong to him, and a much greater wrong to the children. We have no right to waste the child's birthright by ignorant attempts to teach him.

These four requisites are the minimum requirements for a true normal school, which has its distinctive place as a professional school. The child who is to be developed by the teacher is a self-active, rational being; a person, not a thing; a free personality, a moral cause; therefore self-exertion is the first condition of his development. "He stands all by himself in the world as an individual, with his own thoughts and feelings, his own hopes and fears and possibilities, his own relations to his fellow-beings and to God." His individuality is to be respected. The development of the individual according to his needs is the end toward which all are to be trained.

The art of teaching is the finest of fine arts, inasmuch as it deals with the spiritual material of human life. Its exercise calls for an artist who has the greatest natural aptitude, the noblest character, the fullest knowledge, the ripest experience, and the most delicate skill. We cannot set the standard of the normal school too high.

SUBJECTS FOR COURSE OF TWO YEARS

The students entering upon the course are graduates of a good high-school course of four years, or have had an equivalent of this course.

1. An elementary course in psychology to indicate distinctly the principles and the method of the teaching in the school.

2. The educational study of the following subjects for knowledge of their educational value, their principles, and the method of teaching in each :

(*a*) *Mathematics.*— Arithmetic and bookkeeping, elementary algebra, and plane geometry.

(*b*) *Nature studies.* — Minerals, plants, animals, physical force, chemical force, geological agencies, geography, the human body, physical training, manual training.

(*c*) *Language.*— Reading and vocal culture, English, including orthography, orthoëpy, etymology, grammar, composition, rhetoric, literature, drawing and color, vocal music.

(*d*) *History.*— History of United States and civil government, school laws of the state, history of education.

3. The educational study of man, body and mind, for the principles of education the art of teaching, school organization, school government.

4. Child study, observation and practice in the model school.

STUDIES FOR COURSE OF FOUR YEARS

The students start with the same qualifications as in the two-years' course.

1. Elementary course in psychology, to indicate distinctly the principles and the method of the teaching in the school.

2. The educational study of the following subjects for the knowledge of their educational value, their principles, and the method of teaching in each :

(*a*) *Mathematics.*—Arithmetic and bookkeeping, algebra, geometry, plane and solid, trigonometry, and surveying.

(*b*) *Nature studies.*—The same subjects as in the two-years' course. *Science:* physics, chemistry, mineralogy, botany, zoölogy, geology, and astronomy.

(*c*) *Language.*—More extended study of the subjects of the two-years' course, Latin, Greek, French, and German.

(*d*) *History.*—History of the United States and civil government, school laws of the state, general history, history of education, political economy, sociology.

3. The educational study of man, body and mind, for the principles of education, the art of teaching, school organization, school government.

4. Child study, observation and practice in model school.

The subjects should be taken in the order of their dependence, and the distribution of time upon them will vary with the internal conditions of each school. Minimum and maximum courses should be arranged to meet the varying abilities of the students.

A three-years' course may be arranged for the accommodation of those desiring an elective course, by taking the studies of the two-years' course with electives from the advanced subjects of the four-years' course. In some schools a special course is arranged for college graduates, and for teachers of long experience.

The four-years' course is especially helpful in the proper training of teachers for the upper grades of the schools. Its necessity becomes increasingly apparent with the increasing demand for teachers of higher qualifications. Its influence upon those pursuing the shorter course is of great benefit in raising the standard of qualification and in strengthening the desire for more extended professional study.

The graduates from these courses will find their places in the schools according to their ability as teachers. The provision for certificates, diplomas, and degrees varies very much in the different states, and can be improved only as the better quality of the graduates of the normal school commends them to the best public sentiment.

APPENDIX C

A TYPICAL ENGLISH TRAINING COLLEGE

BY GEORGE MORRIS PHILIPS, PENNSYLVANIA

To most American teachers Sir Joshua Fitch is the best-known educator in England; and so, when last November I went to London to learn something of English schools, I naturally called upon him for suggestions. A letter of introduction from an American friend secured a most cordial welcome from Sir Joshua; and let me suggest just here that, while I have no doubt any American teacher would be welcomed by Sir Joshua Fitch, the American traveler who wishes to get any intimate knowledge of European people or institutions should be sure to take with him letters of introduction. They are much more essential there than they would be in America.

Sir Joshua Fitch was, a few years ago, knighted by Queen Victoria for his eminent services to education, but he was recently retired from active school work. Apparently, however, this only allows school committees and boards now to demand all of his time for addresses, conferences, etc. Thru him I met Mr. Buxton Morrish, of London, chairman of the British and Foreign Society's committee on teachers' training colleges, a typical English gentleman, who, having retired from active business, is able to devote his time largely to serving the public, and of course without compensation. Instead of paying school directors for their services, as is often suggested, it seems to me that we should be much better served in this country if many more of our officers were unpaid, in the hope that, when made posts of honor instead of profit, more of them would be filled by capable, public-spirited men, like Mr. Morrish.

The British and Foreign Society was organized about the beginning of the present century to promote Lancaster's scheme of general elementary education. In 1870 Parliament, for the first time, authorized a public-school system in England, and as the British and Foreign Society's schools then began to be gradually turned over to the school boards organized under this act, the society now devotes its attention and its resources largely to the training of teachers. It must be borne in mind that in England there are no state normal schools, in the ordinary American sense of the term. All of the teachers' training colleges, as normal schools are universally called there, are private enterprises, many of them under the auspices of the British and Foreign Society, or its great rival, the National Society. Such of these as provide training for teachers in the elementary schools may be aided liberally by the government, provided they comply with the government's conditions. There is a great gulf fixed in England between elementary- and secondary-school teachers, and, as the state makes practically no provision for assisting in secondary instruction, so it gives no help to the training of teachers for secondary or high schools.

Separate training colleges are generally provided for the two sexes. Accompanied by Mr. Morrish, I spent a day at the Isleworth Training College for men, which is situated a few miles west of London, and which is considered one of the best schools of its class in England. Like most of the training colleges generally, I found this to be a boarding school, with a two-years' course of study. It has a fine building, well adapted to its purpose, surrounded by considerable grounds. Practically all of its students are Queen's scholars, that is, they have passed an entrance examination by government examiners, and, almost without exception, have been pupil teachers for four years in the elementary schools. This pupil-teacher system, by the way, which provides that boys and girls who intend to become teachers may, when they have finished the elementary schools at the age of fourteen, become assistant teachers in elementary schools for four years, assisting

the regular teachers for a part of each day, and studying the remainder of the time, is universal in England, and the great majority of elementary teachers are ex-pupil teachers.

At the end of each year's course the college students are required to pass a state examination, which, like the preliminary examination, is uniform all over England. The course of study is also carefully laid down by the government authorities, and all students must have physicians' certificates of physical fitness before entering the school.

The pupils sleep in small cubicles, each about nine by five feet, separated from each other by partitions six feet high. Of these there are some seventy-five in one great room. Each contains simple but comfortable furniture, and teachers occupy certain of these small bedrooms among the students. They are not separately lighted; students must, therefore, study either in the schoolrooms or in the large "common room," the latter being an important feature in English schools.

In the dining-hall the teachers and a few postgraduate students sat at a table on a raised platform; the undergraduates at long tables below. While there evidently were two bills-of-fare, yet all the tables were apparently well provided, and I was told that the dietary of the school was arranged by a physician. Some of the teachers wore the scholastic gowns which in English schools everywhere mark teachers who hold university degrees.

The school contains about one hundred and fifty young men, the total cost of maintaining the school being rather more than three hundred dollars per year for each student. The government gives each training college three-fourths of the legitimate cost of maintaining each student for the time he is in attendance. This is the general rule thruout England. A student at Isleworth pays one hundred dollars as an entrance fee, and has no other school expense during his two-years' course. The balance of the cost is made up by the society itself, and generally in England almost all the living expense, as well as the tuition of students in the training colleges, is paid for them.

The course of study is largely academic, only about one hundred hours of class-room work in the whole two years being given to pedagogic branches, including methods of teaching, psychology, etc. One hundred and fifty hours are required by law to be spent in practice and observation in practice schools. Here there had been considerable difficulty in securing sufficient facilities for practice work, and the school authorities, in connection with some public-spirited neighbors, had built and equipped a private school for the neighborhood, which was used also as a practice school. Each graduate is obliged to pledge himself to teach for two years in the elementary schools of the kingdom, altho I found a few students in the school not intending to teach in the English schools. These, however, got no benefit from the government grant for support, and paid the full cost of their board and tuition. Special inspectors are appointed by the government for the training colleges, and the facilities and details of the work generally must conform to the government requirements, and are carefully looked after.

The teachers of the training college are scarcely as well paid as corresponding teachers in America, and yet there is no more difference than between salaries in other callings in the two countries. I was informed that the average salary received by graduates of this college for their first year's work was about $425. This, however, was said to be in excess of that received by recent graduates of the training colleges generally.

At the end of the two-years' course, and after passing the final examinations, graduates get preliminary certificates which permit them to teach in the elementary schools of the kingdom without further examination; but, at the end of two years' successful teaching in the same school, they may get second diplomas, technically called "parchments."

Teachers are not yet everywhere required to be graduates of training colleges, but in London, and some other places, the local school authorities now require that all teachers in board schools must be graduates of training colleges.

Students of educational systems will be struck with the resemblance between the training colleges of England and the state normal schools of Pennsylvania. In both cases these schools are privately founded and controlled, altho in Pennsylvania the state now appoints one-third of the trustees, and, in Pennsylvania also, the founding and organization of the schools are more closely regulated by law.

The normal schools of Pennsylvania, like the training colleges of England, are all boarding schools, and must be so under the laws of the state.

In Pennsylvania the normal schools all charge tuition, but the students' expenses are reduced by "state aid" appropriated regularly by the legislature, and paid to the schools to reduce the expenses of the students preparing to teach, tho this state aid is very much less for each student than the corresponding government grant in England.

In both cases the final examinations are conducted by examiners not connected with the schools, and graduates who receive benefit of the state aid are required to agree to teach in the state schools for two years, and, in England as in Pennsylvania, at the close of two years of successful teaching, a second certificate or diploma is granted to the student.

It would seem from these coincidences that the framers of the normal-school law of Pennsylvania must have been familiar with, and to a certain extent have copied, the English system, which took substantially its present form in 1843.

APPENDIX D

CONTINUOUS SESSIONS IN NORMAL SCHOOLS

BY IRWIN SHEPARD, PRESIDENT STATE NORMAL SCHOOL, WINONA, MINN.

[The following extract from a paper read at the meeting of the Department of Superintendence at Chattanooga, Tenn., in February, 1898, is reprinted at the request of the Committee on Normal Schools.]

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No feature of our educational system is, by virtue of any authoritative adoption, exempt from criticism or change.

The conservative force in our national system of education is the strength of tradition. This conservatism often binds the teachers more strongly than the people, for it frequently happens that the former have progressed more slowly than the latter and have yielded tardily to the advanced demands of public opinion. The traditional close classification of the graded schools, with its rigid system of annual promotions, altho long since condemned by public sentiment, still quite generally prevails; or at most has yielded only to the extent of substituting semi-annual for annual promotions. The method of determining qualification for promotion by written examinations alone was generally retained long after the people distrusted its efficiency and even demanded its discontinuance. The three-months' annual vacation season has come to be regarded by most teachers as an inalienable right, as well as a necessity, and any disposition to lengthen the school year is generally looked upon as an unjustifiable encroachment upon this right.

It requires some courage to suggest, even in a convention of progressive superintendents, that other seasons than summer time may be equally profitable for vacation purposes, and that the intellectual work of the schoolroom may be as well done in summer as the intellectual work of other callings.

I. *In elementary schools.*— The average school year for the United States is about seven months. In many places, especially cities, it has been extended to ten months in

answer to popular demands. It is not entirely clear why the extension should stop here. In fact, very good reasons can be given why the school should be open as continuously as the factory, the workshop, and the store.

If it is replied that pupils and teachers need two or three months annually for rest and recuperation from the intense strain and pressure of the year's work, it may be questioned if a system which produces strain and pressure so near to the point of exhaustion is not unwise and indefensible, and if a distribution of the same work over a longer period would not be wiser, tho it involved longer or even continuous sessions. It is certain that the point of efficient work on the part of both teacher and pupil is passed long before strain, over-pressure, or exhaustion appears.

We may even question if the valuable enrichment of the courses of study in elementary schools, made in recent years, has not unwisely increased the pressure of daily work in the absence of any corresponding extension of the school year.

The annual vacation itself, deemed so essential for rest, contributes in no slight degree to the burdens of the already overtaxed year which follows, by the necessity for recovering the loss incident to the breaking down of intellectual habits and the waste of acquired knowledge during the long vacation, even if no more serious results appear.

There are certain valuable compensations for the long school vacation when the pupil can turn to some helpful occupation, as may usually be done in rural communities; but this is seldom the case in cities or even small towns; therefore the question of continuous sessions *versus* short school years and long vacations belongs rather to the graded than to the rural schools.

The profitable employment of the time of children of school age during the long summer vacations is often the most serious and perplexing problem that confronts parents living in cities and towns, even under the most favorable circumstances; while in the case of children living in crowded districts of large cities, or in the saloon-cursed village, it becomes a question of vital importance to society as well as to the family.

It is not difficult to conceive of such an adjustment of school work, rest, and recreative occupations that continuous attendance upon school may not only be free from overwork or strain, but may furnish the most healthful and enjoyable life that a child can live; especially if vacations may be taken, without prejudice to progress, whenever needed or whenever the time could be otherwise more profitably spent. The ideal school life is that of the most healthful living, and does not admit the necessity for long vacations as periods for recuperation from overtaxing or unhealthful requirements.

However, the plan of continuous sessions does not necessarily involve continuous attendance on the part of the pupils or continuous service by teachers. It means, rather, continuous opportunities to the pupil for attendance on regular school sessions, and relief to the teachers from enforced vacations, always annual and always at the same season.

In view of the growing demands for vacation schools, especially in large cities, it is important to determine whether these schools shall be preventive and sporadic, without organic connection with the school system; or shall be constructive, progressive, and so adjusted as to contribute to advancement in the regular courses of the schools or to proportionate relief from the daily requirements of the following year. A division of the present school year into three quarters of twelve weeks each, with quarterly promotions, would be the first and most important step toward the organic connection of vacation schools as a regular part of the school year with the work accredited as such.

The question may be asked if as much work can be accomplished in the twelve weeks of a vacation quarter as in any other quarter of the year. We have come to understand that the ability of anyone (children especially) to do intellectual work is dependent upon individual vitality rather than atmospheric temperature. We know that the vitality is lowest in winter and early spring and at its maximum in the growing season—late spring and summer. The general experience of summer vacation schools confirms the

belief that as much and as effective work can be accomplished in summer time as in any other part of the year if the early morning hours are substituted for the afternoon session; while the opportunities to pursue the various forms of nature study excel those of any other season.

If, however, continuous attendance is not desired, continuous sessions, with the quarter of twelve weeks as the promotion unit, would make possible the distribution of vacations thruout the year, and the relief of crowded rooms to a correspondiug extent; or, in other words, would increase the school accommodations by 33⅓ per cent.

Is it a wise policy for a city whose enrollment exceeds its seating accommodations to close its buildings for three months of the year, if by any plan of administration these buildings may be made available to relieve the excessive demands of the other nine months? Under the pressing demands everywhere for greater school accommodations, is it justifiable that the common-school property of the nation, valued at five hundred millions of dollars, should be permitted to lie idle from three to five months annually? Compulsory school attendance and compulsory exclusion from school during the long vacation are antagonistic principles. The general tendency of the educational world to "hibernate" in summer time is contrary to all of the analogies of nature as well as of life in other callings.

II. *In normal schools.*— The great increase in the number, importance, and attendance of summer schools is not more significant than the fact that this attendance is largely made up of teachers in regular service, who are pleased to devote no small share of a meager salary and of the annual vacation to professional advancement.

The reports of the United States Commissioner of Education show that 75 per cent. of the teachers of the country enter upon their work without any special training whatever, while the training of a large share of the others is much less extensive and satisfactory than is required in any other profession. Few who continue in teaching resign to make further preparation. Therefore the training of the teacher *while in service* is a problem of the utmost importance.

This problem would seem to be not difficult of solution when we reflect that the average school year for the entire country is but seven months, and rarely exceeds forty weeks. No other calling affords such generous vacation leisure for self-improvement. The difficulties of the problem lie in the fact that the three to five months of enforced vacation include or coincide with the annual long vacation of the normal schools and all higher educational institutions.

Teachers' institutes and the summer schools are designed to supply the demands for vacation opportunities for professional improvement not offered by the normal schools and colleges; either because their doors are closed, or because their courses of study and term arrangements do not enable a teacher to use with profit the long vacation periods. While summer schools and institutes have accomplished much, they do not by any means solve the problem of the efficient training of the teacher in service.

The state of Minnesota has led all other states in the establishment of vacation training schools for teachers. About fifty of these schools are in session every summer, for four weeks each, with a total attendance which usually equals or exceeds the entire teaching force of the state; while, until the summer of 1897, all of the four normal schools of the state, equipped at an expense of more than a million dollars, were closed, their laboratories and libraries deserted, and their faculties scattered, supposedly taking much-needed vacations, but many of them in reality teaching in these same summer schools, often under most adverse conditions as to surroundings and appliances.

In September, 1895, when the faculty of the State Normal School at Winona reassembled after the annual vacation, during which half of the members had been teaching in the summer schools, a series of special meetings were held to consider the relation of the normal schools to these summer schools. A few conclusions were soon reached:

1. That the phenomenal growth of summer training schools for teachers indicated a demand which the normal schools had not met.

2. That these summer schools were creating new demands which only normal schools could efficiently meet.

3. That, under the existing conditions for admission to teaching service, it is quite as much the proper function of the normal schools to provide for training teachers *in service* as to furnish a preparation for entering such service.

4. That the rural-school teachers, with an average vacation of five months each year, furnished at the same time the most needy and the most available constituency for such training.

5. That the policy is indefensible which closes the normal schools during that period of the year when teachers are most at leisure to attend school.

6. That the terms of normal schools should be so adjusted in time that the usual long vacations of teachers could be utilized for further preparation, and that the course so provided should not be special, but regular and progressive, and should constitute organic parts of the full courses offered.

It was decided, after full discussion, to recommend and, if possible, secure the adoption of the following general plan:

1. The school year should be divided into four quarters of twelve weeks each, commencing, respectively, January 1, April 1, July 1, and October 1.

2. The courses of study should be organized by quarters; the work of each quarter constituting a full unit on which credit should be given whenever completed.

3. Classes should be graduated at the close of each quarter and new classes organized at the opening of each quarter, if necessary.

4. Special classes should be organized for graded-school teachers for the first six weeks of the summer quarter (July 1 to August 15), and this work should apply upon regular courses, with provisions for completing the quarter's work by non-resident study thru correspondence during the ensuing school year.

5. Since the chief aim of this plan was to bring the normal schools into more helpful relations to the rural schools, whose interests they were primarily created to serve, the quarters should be so arranged that a rural-school teacher could teach the usual winter term of four or five months — which would always come within the autumn and winter quarters (October to April)— and attend a normal school one or both of the remaining quarters, with a reasonable vacation; or he could teach the entire school year (October to July) and attend one full quarter each year (July to October).

In this way progressive courses of normal-school work could be completed without withdrawing from rural school service. This alone would be a distinct gain of the teaching supply of the rural schools.

Incidentally this plan would prove a boon to hundreds of self-supporting young men and women, from whom the best teachers of the state are drawn, who would be enabled to work their way thru the normal-school courses with little difficulty and with little or no loss of time from teaching service.

It was believed that the results of training received while alternately teaching and attending school would also commend the policy.

The plan was subsequently approved by the presidents and faculties of the other normal schools of the state and presented to the state normal board for adoption. After full consideration for a year it was unanimously adopted and steps taken to secure the needed appropriation for putting the plan into operation in all of the normal schools of the state. It was estimated that an increase of 25 per cent. in revenue would cover the expense of the proposed increase in the length of the school year of 33⅓ per cent.

The teachers generally thruout the state approved the plan and gave it active support. Sixty-two out of eighty of the county superintendents, and almost an equal

proportion of city superintendents, joined personally in urging upon individual members of the legislature its advantages. No more popular educational measure ever came before the legislature of the state. The year 1897 was not a favorable one in which to secure appropriations for new or untried measures. The avowed policy of the legislature was to grant sparingly appropriations for the actual necessities only of the state institutions, but nothing for enlargements. Yet, so great was the confidence in the plan that the full appropriation asked for the two older schools — at Winona and Mankato — was granted — a larger increase than had ever been granted for extension of normal-school revenues in any one year in the history of the state.

On July 1, 1897, these two schools entered upon the new plan. Duplication of the work of the summer schools was avoided. Students were not admitted for less than a full term or quarter. Those only were admitted to the six-weeks' special courses whose schools would begin before the close of the quarter. Rural-school teachers were not admitted for less than the full quarter of twelve weeks. At Winona the standard of admission was radically advanced to the point of admitting only graduates of high schools or teachers actually in service.

Altho the announcement of the plan was not made until late in May, and forty county summer schools, enrolling seven thousand, were in session thruout the state, the attendance during the summer was all that could be desired in numbers and surprisingly good in quality. Five hundred were enrolled in the two schools. At Winona 15 per cent. of the enrollment were former graduates of the school, all occupying important positions as teachers in the state, who had returned to enter upon the work of the recently extended advanced course; 40 per cent. were graded- and rural-school teachers; 40 per cent. were high-school graduates. Only 5 per cent. did not belong to one of the above-named classes. The average age was twenty-three years and the average teaching service four years, varying from one term to twenty years.

It was predicted by some that the model or training schools could not be maintained during the summer months; but here again the success was marked, notwithstanding the fact that these are tuition schools.

Many parents have transferred their children permanently to the model schools because of the evident advantages of continuous sessions. In the model schools promotions occur quarterly. Vacations of one quarter may be taken any quarter of the year, either semi-annually, annually, or biennially; or the pupils may attend continuously, taking full or partial work, with corresponding advancement if such attendance is deemed advisable.

The advantages of these various options are quickly seen, and different plans are chosen to suit individual pupils. The work of last summer's quarter was not more exhausting to teachers or pupils than that of any other quarter, nor has it appeared to be less efficiently done.

No year in the history of the schools has shown so large an increase in enrollment as the present. While the lengthened year will show a proportionate increase in results, in graduates, and numbers instructed, the most important advantages appear in the large number of teachers in service who are preparing to take up regular courses while continuing their work in teaching, while many students, who formerly could not see the way to complete more than the short elementary course, now choose the full advanced course, under the facilities offered for vacation attendance.

Continuous sessions do not involve continuous teaching service by the faculty. Vacations will be granted as heretofore, with the difference that any quarter may be selected, subject to the approval of the management of the school; or, by continuous service, vacations may be accumulated to enable a teacher to secure a longer leave of absence. Additional teachers will be employed as assistants in the various departments, who will be competent to take the classes of the absent teachers.

A proposed plan, which is favored by many, provides that each teacher may serve four consecutive quarters and take the fifth quarter for a vacation. This would bring each successive vacation of any teacher at a different season of the year.

Students are not expected to attend continuously except by permission of the faculty. It is already found that they are not so averse to stopping for rest when it is needed, since work may be resumed at the opening of the next quarter. Similarly, students are more willing to repeat work that has been imperfectly done than under the usual plan of classification, which imposes the penalty of a year's delay if the work of a single quarter is lost or repeated.

Under the usual plan normal-school graduates are annually thrown upon the market in the month of June, just when the graded-school authorities are seeking teachers to fill vacancies for the following year. The natural result is that the supply is exhausted before the rural-school authorities are ready to act on the employment of teachers for the schools to begin later, in October or November. Hence only the undergraduate supply is left for the rural-school service.

Under the Winona plan the classes graduating in September, December, and March will be available for rural-school service. Even tho this service shall be brief because of the competition of the graded schools offering a longer year, more certain tenure of appointment, and higher wages, it will be a distinct gain to the rural schools, as well as to the teacher herself, if she is able to say: "My first teaching service after graduation was in a rural school."

The plan was presented to the Committee of Twelve on Rural Schools at its meeting in Chicago in 1896, and received its indorsement and approval in both the report of the general committee and of the Subcommittee on Supply of Teachers.

The 160 state normal schools of the United States, equipped with buildings and appliances at an expense of over $17,000,000, graduate about 8,000 teachers annually, which is a small proportion of the needed supply; and yet all of these buildings are closed during three months of the year. An additional annual expenditure of about $600,000 would open every one of these 160 state normal schools for the additional three months of each year, afford 50,000 teachers annual vacation opportunities for professional study, and secure to all teachers the many other advantages of continuous sessions.

DISCUSSION[1]

[The following discussions relate to the section of the foregoing report entitled "Training Schools."]

Thesis II. In comparison with other lines of work in a normal school actual teaching is capable of ranking as the most valuable course for the student, since it furnishes at the same time both theory and practice.

JOHN W. HALL, superintendent of the training department, Greeley, Colo.— That the practice teaching in a normal school is capable of ranking as the most valuable course for the student is to me an important truth. That it usually so ranks is probably quite a different statement. Dr. Payne, it seems to me, is altogether right in denouncing the practice teaching as he describes it in his recent interesting article in the *Educational Review*. The teaching and the critic work that he therein so graphically describes and so cordially denounces is probably not altogether a figment of the imagination. Let us trust, however, that it is extremely rare. Dr. Payne has given us a vivid picture of what

[1] [It is a matter of regret that several valuable discussions of this department were not furnished for publication, and that several others were furnished in abstract only.— EDITOR.]

practice teaching and criticism should not be, or, as the Germans would say, *ein abschreckendes Beispiel.* The objects of his criticism are obviously based on a total misconception of the principles of teaching, the province of criticism, and the character of a critic.

As fully as the time will permit, it is my purpose to describe one conception of practice teaching, as well as the character of the critic and the province of criticism, in support of the thesis under discussion.

Quoting from our eminent critic: "It is believed that the best way to teach a liberal art is to teach the essential doctrines and principles that underlie that art. Law, medicine, and theology are taught on this plan." In such schools the science is learned, not the art, he says. Nominally this may be true, actually it is not. In the hospital the student visits the patients, accompanied by his instructor, makes his own diagnosis and issues his own prescriptions; when his instructor feels that he may be trusted further, he is allowed more freedom. The instructor keeps a close supervision, but does not interfere so long as the student makes no mistake. The student is not embarrassed nor distressed by this relationship, but is strengthened by the consciousness of an ever-present help. The truth of the quotation is a matter of indifference, however, as the cases cited and the training of the normal-school student are not parallel.

The minimum entrance requirement to our normal school is the minimum requirement to teach in the public schools of the state. The candidate for training in the normal school is then from the beginning a licensed teacher, and were he given charge of a class upon his entrance, nothing more could happen to him, or to the children, than is allowed to happen every day in the public schools. The candidate spends almost two years from this time in trying to master the fundamental principles of his art and in discovering their application in well-directed observation of teaching in the training department. When he does begin to work in the light of these principles, which are as much his as unapplied principles can be, the value of the work to himself and the children cannot be successfully questioned, provided, of course, that the conditions are what they may be, and what they are in many schools.

In the first place, if the student has shown no grasp of the principles involved in a recitation, if he has shown no power of analyzing a recitation and no ability to think out a recitation in a given subject with a given class — that is, if he is unable to plan one — of course he will never be placed in charge of a class. It would be positively injurious to everybody concerned if he were. Having shown himself proficient in these things, the student may be allowed the responsibility of a class. The class is to be his, really his, as much his as would be a class of any grade in a village or city school where he would be under a supervising principal. This class is to be his an hour each day for perhaps half a year. He calls for it at the appointed hour, conducts it to the recitation room and back. He is responsible to the room teacher or the principal for the order and progress of the class while it is under his care, just as the teacher of a grade in a city is responsible to the superintendent, or to the principal of the building. In the former case he is held to a much stricter account than he would be in the latter.

Every such teacher, and every teacher that works at all efficiently, must have in mind more or less clearly *what* he expects to accomplish, and also *how* he expects to accomplish it. Germany's greatest field marshal says that it is, indeed, much to see the end toward which one strives, but it is a great deal more to find the way by which one is to reach it. In order that the critic teacher may know how the student is striving to realize his ideal, and in order for him to be most helpful without being too frequent a visitor in his class, the student is required to give the critic a detailed written plan of what he expects to accomplish in each recitation, and the *how* thereof. If there is need of it, the plan is subjected to a thoro discussion before it is carried into practice.

The student is not to be mastered by his plan; he is to be master of it. It is believed that the general who has made the most thoro and detailed plan of the coming battle

based on the knowledge of the strength and whereabouts of his own forces and those of the enemy, because of that plan will be most liable to inspirations of the moment, and most ready to take advantage of the least false step of his adversary. He never dreams that he must follow a prearranged plan, if events disclose a better. Events, however, never disclose a plan to a planless man. The same is eminently true of the teacher. The full force of the old saying holds here: "Unto him that has [a plan] more shall be added." The teacher that has his lesson mastered in this way is the only one that can be really and fruitfully free, and only under such conditions can his experience be most valuable.

These plans are conscious efforts to make the general individual, to make fundamental pedagogical principles concrete. The student teacher has for the last year and a half been talking glibly and learnedly, perhaps even enthusiastically, about these far-reaching fundamentals. Let him keep his enthusiasm, and he will if it is not a mushroom growth, for he is to see just what these laws of teaching should mean to him in the classroom. In this struggle, which is not without its discouragements, and certainly not without great delights, his critic teacher is his sympathetic friend and helper.

The freedom that is granted the student should be everything that is not license; it should be the freedom of intelligence; he should be limited in what he may do only by the great laws of teaching to which he has declared his allegiance. In fact, only in accord nce with these laws can he be free. Under the kindly and intelligent guidance of his critic teacher he applies these tests and moves consciously toward his ideal. In this experience he comes face to face with the diffculties while there is someone near to whom he may appeal, and who, in these concrete cases, may point the way to solutions which would otherwise be discovered at great waste of time and energy to himself and the children. Here, as in no other way, he realizes the difference between talking about aims; good, bad, and indifferent questions; sequence of questions; self-activity; child doing the work, etc.; and actually doing creditable work from all these points of view economically. Here he gradually becomes his own critic.

Professor Rein says concerning this point:

> The work of the schoolroom is, and will remain, the test for how much the student must yet add to his inner treasures, first of knowledge, but, above all, of clearness, depth, and warmth of moral sentiment. Let us conceive the work of our little practice school in this spirit. We are fortunate that we have it, small and modest as it is, for here we can separate the chaff from the wheat. Here is the field for the growth of character in the teacher who is willing to lessen the distance between himself and his ideal by unceasing effort, by deeds rather than words.

We have too many lamentable examples of men well-grounded in theory and left to themselves to learn the art without supervision and training. The point is well put by "The Autocrat of the Breakfast Table":

> Self-made men? Well, yes. Everybody likes and respects self-made men. It is a great deal better to be made in that way than not to be made at all. Are any of you younger people old enough to remember the Irishman's house on the marsh at Cambridgeport, which house he built from drain to chimney-top with his own hands? It took him a good many years to build it, and one could see that it was a little out of plumb, and a little wavy in outline, and a little queer and uncertain in general aspect. A regular hand could certainly have built a better house, but it was a very good home for a "self-made" carpenter's house, and people praised it and said how remarkably well the Irishman had succeeded. They never thought of praising the fine blocks of houses a little farther on.
>
> Your self-made man whittled into shape with his own jack-knife deserves more credit, if that is all, than the regular engine-turned article, shaped by the most approved pattern, and French-polished by society and travel. But as to saying that one is in every way equal to the other, that is another matter.

A great deal has been said about criticism, not of a reassuring nature. Without criticism there is no assurance that teaching in the training department, or elsewhere, may not be positively harmful. It is necessarily expensive. There are no eyes for the student's faults but his own. His eyes have not been trained upon himself, nor is there a qualified friend at hand for consultation. The student must be made a qualified and

exacting critic of himself, else his growth will cease at commencement. Eternal self-examination is the price of continual progress toward freedom in the teacher.

The real critic is not the chronic grumbler and fault-finder with never a word of commendation; he is not one whose function is to find faults, and who must find them even if they are not apparent to the naked eye, because he is paid for it. This sometime prevalent idea is based upon a false conception of the functions of criticism. Criticism is not necessarily adverse, nor should it ever be simply an opinion or an attack upon devices or so-called "methods" in themselves, but only as they conform or do not conform to a principle. Criticism is interpretation. It calls for a perfect comprehension of the purpose of the author, the artist, the physician, or the teacher, as the case may be; the means he has used to attain that purpose, and the result; that is: What is he seeking to accomplish? Is there anything more worthy of accomplishment in this particular case? If there is, show *why*. What other means would lend themselves better to this end? Wherein were the means used not economical, not most economical? Are the results commensurate with the time and the effort? Wherein has skill been manifested? Do you object to any of the devices employed, or approve any? Give the principles involved. Show how they are involved. Anything in a recitation that is not capable of being based upon a pedagogical law, somewhat as a proposition in geometry may be reduced to its axioms, is not capable of proper defense. No criticism that is not capable of being so based can be either strong or helpful. In pointing out a fault in the solution of a problem in geometry, nothing but an unfortunate manner in the instructor could make it anything but helpful. No man would think of basing his criticism there on personal opinion.

In this way the criticism avoids trivialities, and is given an inevitable and impersonal character seeming to come from the very nature of things, and so is unlikely to give offense. The real freedom of the student is not touched. The critic, pointing out a new and right way, appears as the friend in need. The child making the familiar sloyd model, the oblong window-stick, sees no necessity for making the edges straight and the angles right angles, except that the instructor requires it, whereas, in the construction of a simple pencil box, without murmuring he will make six window-sticks (modified) with limitless pains as to the edges and the angles, for it is the box itself that makes the demands. There is no resentment here against the teacher.

Summing up: In the practice school, then, the student has actual teaching. He makes conscious and directed efforts to realize the laws to which he is subject in actual recitations. He has the freedom of infinite variety under these laws. He goes out into the world a self-critic, with the enthusiasm of intelligent insight, the possibility of infinite growth, and not blinded by a host of superficial devices.

Thesis XXVIII. The training school should be the correlating center of the normal school.

Dr. Lucy L. W. Wilson, department of biology, Philadelphia Normal School.—A specialist in normal schools is a product of recent conditions. In those happy days when one fairly clever man could possess in a general, yet in a sufficiently thoro, way many branches of knowledge, the head of a school could easily keep abreast of the times even in details. He could digest pedagogical pabulum rapidly enough for his teachers, and yet have time for his executive work. Nowadays the former duty is more efficiently performed by the trained specialists to be found in most normal-school faculties, and, in consequence, a new task has fallen upon the principal, viz., to put on the brakes so that the engine be not driven off the track by a specialist who can see nothing in education except in or thru his particular line. For this work more than mere knowledge of various subject-matters is required. Heavenly grace and worldly wisdom combined are a deal more necessary. Even with these it is a difficult problem to get from each department of the normal school proper the most efficient aid for the training school.

Two difficulties stand in the way:

1. The normal-school teacher too often lacks recent experience with little children in the later developments of her own subject-matter.

2. The grade teacher too often is either openly or secretly opposed to the introduction of all such later developments.

The average teacher has an immense reserve fund of inertia, and is ever ready to cry "wolf," by saying to the specialist in that emphatic way of hers: "It can't be done; the course is already overloaded; it is all very nice, but it is not *practical*, for we have not the time." And then aside to her colleagues she utters that fatal phrase, "the newest fad!"

Yet there is much truth in all that she says, and unless one can put his finger on that truth, separating it from exaggeration, natural enough after all, he will be unable to make any headway against her opposition, and in fact he will be unworthy of success, since his failure to recognize this modicum of truth shows that he has not thoroly studied the conditions.

How may the specialist conquer these obstacles?

He must first train himself, and then train the others.

He may train himself (1) by teaching in the training school himself; (2) by studying the grade work as a whole, thus not only obtaining the knowledge that will enable him to make his subject-matter help and be helped by the other work, but also getting a sense of proportion that will keep him somewhat within bounds in his demands on the time both of the children and of the grade teacher. In teaching himself in the school of practice he has begun to train the grade teacher. *He* has learned the limitations, and *she* is learning the possibilities.

In addition to this, the specialist should further help the grade teachers by holding rather frequent and wholly meaty faculty meetings — meetings dealing with facts and their management, rather than with the aimless discussions of questions of discipline, with which teachers are too often bored, not helped.

Two things else are essential to an intimate, helpful connection between the normal and the training school:

1. That the specialist really prepared for the work in the ways indicated above should outline the courses of study in all the grades.

2. That he should supervise the teaching both of the grade teacher and the pupil teacher, helping both by every means in his power, leading each to stand on her own feet in the end.

This, indeed, is the test of the normal-school specialist's efficiency. If he makes the teachers eager to do his special work with the children, then, and then only, has he succeeded in what should be his aim.

Æsop's fable of the "Belly and its Members" has been quoted in other halls than this when questions of administration have been discussed. The truth that it embodies is so fundamental that its application is world-wide. It may be as clinching an illustration in educational congresses as it was in the Roman senate.

My own experience has proved to me that the period of standing apart in stubborn opposition and adverse criticism is passing away. Teachers are now hungry to be fed, grateful for what is given them, eager and able to use it for their own upbuilding. And if we specialists would only remember, what we are apt to forget, that the training school is the *true center of the normal school*, that our specialty must be subservient to its good, then, indeed, will come the golden age of usefulness to all our normal schools.

Thesis XXV. The idea that a normal school should be provided with a training school and a model school besides is hardly feasible.

PRESIDENT W. E. WILSON, State Normal School, Ellensburg, Wash.—The thesis seems to assume that separate schools for observation and practice would be desirable. We are to inquire into the feasibility of a desirable policy. But is not feasibility here a local question? Why not feasible? The hindrances seem to be (1) the cost, (2) the lack

of pupils perhaps; (3) adverse sentiment, and (4) increased difficulties of administration. These are surely not insurmountable hindrances everywhere. How far they are is a local question.

The vital question involved in this consideration of the general policy of normal schools is not what is feasible, but what is desirable — what is necessary for the highest efficiency of the schools.

It may safely be predicted that if it were deemed very important — even necessary to the full success of a normal school — that separate schools for observation and practice be provided, their maintenance would be found to be feasible at once in the normal schools that are most liberally supported, and very quickly afterward such dual training schools would become common, just as training schools and kindergartens were established everywhere as soon as their necessity came to be generally accepted.

We are discussing feasibility, the *assertion* of our thesis, but it is the assumption that ought to have our attention. This seems to me the more important because behind the assumption that separate schools are desirable seems to be another, viz., that, after all, separation is not necessary or very important. How important is it that a school for observation distinct from the school of practice be provided? If, as some believe, the separation of practice schools from those for study and observation is necessary in order that the art of teaching may be most advantageously studied, that is one of the most important advances in normal-school policy that should immediately be made.

In discussing this question we should consider:

1. Whether training schools, as departments of normal schools, need be made better schools for the children who compose them. It is widely thought that a training school cannot be as good a school for the children as one wholly under a regular teacher. There is a presumption against the training school as a good place for children, whether or not this is well founded. Is it not worth while to inquire whether the dual training school might not improve substantially the conditions for making the normal training school the best kind of a school for children? A school that is not a very good school for its pupils cannot be a very good school for the students who are learning to teach in it.

2. Whether the single training school used for practice can also afford the necessary means of study, by observation of children, of the organization and management of schools and of teaching. The wisdom of founding the study of teaching upon concrete facts, upon observation of schools and children and the work of teaching, is bound to get recognition soon. The normal school must provide opportunity for its students, not merely casually to observe, but systematically to *study* schools in operation. It will not be a question whether these schools for study should be in the hands of beginners or expert teachers, whether under continuous instruction and government or constantly changing teachers.

3. Must not the normal school provide ample opportunity for practice and for *progressive* steps in practice, the last step being independent practice, the student being in charge of the school thruout the day and for a period of some weeks?

Is it feasible to make the same school serve these several purposes well and answer the demands that progress in teaching the art of teaching is making upon the training school? Can it be a practice school for students at all stages of their progress, and yet a favorable place to form ideals and get the inspiration and suggestions which a student of any art finds in studying the work of a master?

The question of feasibility cannot be answered by an expression of opinion or by discussion. It will take a period of twentieth-century history to dispose of it. But what if it should be found upon trial that a system of training schools can be maintained in which model schools representing all the grades, taught by teachers of superior ability, are conducted separately from the schools in which practice is carried on in two or three stages; and what if it were found that this system not only answered well each of the demands

made upon it, but that its cost were only 25 per cent. to 50 per cent. more than the cost of schools necessary for practice alone?

I think it can be shown that a training school with 400 to 600 pupils can be conducted successfully upon the plan of separate schools at a cost not more than 25 per cent. greater than proper provision for sufficient practice would require.

With 200 to 400 pupils the cost would be greater proportionally, and with fewer than 200 a complete system would hardly be feasible.

Thesis XXIV. Until a high degree of independence and skill in planning and conducting recitations has been attained, the written plan of each recitation, after having been accepted by the critic teacher, should lie upon the table in the room during the period of instruction, subject to general inspection.

Miss Marion Brown, principal of the New Orleans Normal School.—The aim of normal-school training is to ground students thoroly in the principles of education and their application to the various branches now in our common-school curriculum, and to train students to put theory into successful practice in actual schoolroom work, thereby developing and testing the student's teaching power.

The student, ready to begin practice teaching, is at least eighteen years of age, usually somewhat older, has had a high-school education or its equivalent, a review of the common-school branches with a view of teaching them, considerable practice in making lesson plans, observations of model lessons given by teachers and fellow-students, and considerable theoretical knowledge of the principles of teaching and governing.

Practice teaching is intended to give students an insight into and a measure of control over the details of teaching and managing an ordinary schoolroom; to develop the student's power by making him work out his own salvation in the light of previous preparation, with assistance and suggestions from the critic teacher.

In the ordinary public-school room a teacher has charge of from thirty to fifty children at least. She must plan for the eight or ten subjects now in our elementary-school curriculum, for their correlation with each other and with the seat work, for the relation of the day's work to the week's work and to the year's work, for the many minor details of merely mechanical work, and for the equally as important relations of the children to the teacher and to each other.

That the teacher successfully to meet these varied demands on time and strength, mental and physical, needs a special training goes without saying.

"Events never disclose a plan to a planless man;" therefore the normal school must exact plans frequent and varied. The student must be able to plan elaborately, taking note of many details; also to make effective brief working plans, fitted for the crowded day and heavily taxed strength of the ordinary grade teacher.

If students are kept too long on making elaborate plans, there is danger that they may come to regard the children as made for the plan and not the plan for the children; they will incline to adhere too closely to the plan approved by the critic teacher.

Students must be trained to plan carefully and thoughtfully, and to be critical of their own plans and work. They must also be trained to plan the day's work without too much labor; hence as soon as possible, when doing practice teaching, students should assume the responsibility of making their own plans; the critic teacher should then require a sort of skeleton plan according to a definite order, including a memorandum of work accomplished and a sketch or outline of the proposed work.

Students failing to plan successfully should be required to make plans, detailed and skeleton, for designated work, until defects have been remedied.

In our desire to require of students the skill and finish of experienced teachers, and in the desire of heads of departments to make the work of their departments the work *par excellence* of the training school, we are beginning to lose sight of the students themselves.

The merely mechanical work of the daily writing out of elaborate plans with sufficient neatness to escape the censure of the critic teacher is quite a tax on time and

strength; students soon come to see that elaborate planning is impossible when their present teaching time shall be multiplied by four or five in their own schoolrooms, and, unless they be taught some form of plan more suited to the exactions of an ordinary teacher's time, they will encounter the Scylla of overtaxing themselves by too conscientious effort to follow training, or fall into the Charybdis of letting luck replace continuous effort. We can foretell the result in both cases.

Thesis X. Next to a wholesome personality, the special feature of a critic teacher should be the ability to show particularly the merits, as well as the defects, of instruction, basing criticisms plainly upon accepted principles of teaching.

Miss Harriet M. Scott, Normal Training School, Detroit, Mich.—A wholesome personality is desirable. A teacher's influence depends more upon what she is than upon what she says. What she is depends upon her philosophy of life.

This time of rapid development, when old landmarks are disappearing, demands for a teacher one who is well-poised, one who has a positive rational and ideal outlook upon life. Any other attitude fails to provide healthful stimulus, and to communicate the steadiness and serenity essential to the best work.

The critic teacher needs to study students as individuals. She will thus know the talents, deficiencies, and needs of each student. The teacher's efforts after such study would be directed toward the highest advancement of those showing fitness for the work. The greatest advancement is promoted thru the positive course (showing the merits).

The negative course (showing defects) without the positive is of no value. The negative can be used temporarily as a spur or warning, but the positive gives a standard or ideal toward which to work. Prolonged consciousness of defects produces discouragement and depression. The student needs the highest vitality for the work; discouragement and depression lower vitality.

A good critic teacher requires general culture, professional knowledge, and skill in teaching. Otherwise criticisms are more or less matters of opinion rather than knowledge, and hence cannot be vital. The acceptance of criticism or ability to defend one's position is quite as necessary as that criticism should be given; hence there should be some common ground for argument. This can be found only in accepted principles of teaching. Criticism based upon principles prevents off-hand judgments, inspires confidence, and forms the basis for future progress.

DEPARTMENT OF MANUAL TRAINING

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 12, 1899

The first session of the department was opened in Elk's Hall, 231 South Spring street. In the absence of the president, Judson E. Hoyt, Menomonie, Wis., and the secretary, Charles A. Bennett, Peoria, Ill., Principal Charles H. Keyes, Holyoke, Mass., acted as president, and James E. Addicott, of San José Normal School, California, as secretary.

The first paper read before the department was entitled "The Teacher in the Manual-Training School," by W. A. Edwards, president of Throop Polytechnic Institute, Pasadena, Cal.

The second paper was read by Vinton S. Paessler, principal of Barlow School of Industrial Arts, Binghamton, N. Y.; subject, "The Educational Value of Metal-Working."

Discussion of the two papers read by William F. Ringnaldo, of California; Frank H. Hall, Chicago, Ill.; C. A. Kunou, Los Angeles, Cal., and Principal C. H. Keyes, Holyoke, Mass.

The department voted to recommend to the Board of Directors a change of the name "Manual and Industrial Department" to the "Department of Manual Training," and the secretary was asked to communicate this action to that body.

Acting-President C. H. Keyes then appointed the following nominating committee:

C. A. Kunou, Los Angeles, Cal. V. S. Paessler, of New York.
Frank H. Hall, of Illinois.

The meeting was adjourned to meet the following day at 2:30.

SECOND SESSION.—THURSDAY, JULY 13

The department was called to order at 3 P. M. by Acting-President Keyes.

The Committee on Nominations reported the following nominees:

For *President*—Charles H. Keyes, of Massachusetts.
For *Vice-President*—Charles A. Bennett, of Illinois.
For *Secretary*—L. A. Buchanan, of California.

On motion, the report of the nominating committee was received, and the secretary was instructed by a unanimous vote of the department to cast the ballot for the nominees.

The first paper on the program was read by Miss Gertrude E. English, principal of Farren School, Chicago, Ill., on "Constructive Work in the Elementary Schools." The paper was discussed by Mrs. C. L. Place, of the State Normal School, San José, Cal.

The second paper was read by James E. Addicott, State Normal School, San José, Cal., the subject being "Correlation of Manual Training with Other School Subjects." The paper was discussed by P. M. Fisher, Oakland, Cal., and F. H. Meyer, Stockton, Cal.

The next paper was read by Miss Annette Johnson, Los Angeles, Cal., on "The Manual-Training System of Los Angeles."

In the general discussion which followed the following members took part: C. A. Kunou, Los Angeles, Cal.; Miss Perla G. Bowman, of Ohio; Miss Edna Rich, Santa

Barbara, Cal.; Miss Mertice MacCrea Buck, New York city; President C. H. Keyes, Holyoke, Mass.; P. M. Fisher, Oakland, Cal.; C. M. Miller, Los Angeles, Cal.; Charles H. Wright, Pasadena, Cal.; L. W. Buchholz, Tempe, Fla.

JAMES E. ADDICOTT,
Secretary.

PAPERS AND DISCUSSIONS

THE TEACHER IN THE MANUAL-TRAINING SCHOOL

BY WALTER A. EDWARDS, PRESIDENT THROOP POLYTECHNIC INSTITUTE, PASADENA, CAL.

Charles Lamb, speaking of his sister Mary, tells us that her education was not much attended to, but that "she was tumbled early, by accident or design, into a spacious closet of good old English reading, without much selection or prohibition, and browsed at will upon that fair and wholesome pasturage." And he adds: "Had I twenty girls, they should be brought up in exactly this fashion." However highly we may value the study of English literature as a means of education, I suppose none of us would be ready to adopt the whimsical educational scheme here outlined. Its one great defect is the omission, not of certain essentials of the modern curriculum — number work, nature study, or even sloyd — but the lack of an intelligent, sympathetic, living teacher. Not books, apparatus, method, but *teachers* make a school. President Harper has truly said that the old definition of a university — a saw-log with Mark Hopkins and a student sitting on it — is entirely inadequate in view of the elaborate equipment now demanded in universities. But it still remains true that the saw-log *with* Mark Hopkins comes much nearer the ideal university than all the material equipment of Williams College *without* him and his fellow-teachers. The soul of the child is akin, not to the lifeless matter about him, but to the soul of his teacher. And he recognizes and responds to this relationship. "Iron sharpeneth iron; so a man sharpeneth the countenance of his friend."

But it is surely unnecessary for me to urge upon the consideration of this audience arguments to establish the importance of the teacher. Accepting this without further discussion, we may well ask where we are to get the best teachers as we need them. What training ought they to have had, and what kind of an institution will best give that training? One of our important industries in this and other parts of the country is the manufacture of sugar from the sugar-beet. Now, I understand that the managers of beet-sugar factories, knowing just how many beets they can use in a season, are not content to trust to chance for their annual supply, but make long-time contracts with the farmers round about, the

farmers agreeing to plant yearly a certain acreage with beets, and the factory covenanting to buy the product. Let us be not less wise in our day and generation, but, knowing something of the qualifications needed in a teacher in a manual-training school, let us do what we can to insure proper and adequate training for those who are to teach.

Where may one best make his preparation for the teaching of sloyd? Shall he be content with the sloyd training given in such of our standard normal schools as include this subject in their curriculum, or shall he seek the opportunities of such special schools as the Sloyd Training School of Boston? Shall he take a general teacher's training course of three or four years, making a more or less thoro study of all the subjects of the curriculum — and incidentally of sloyd — exploring their varying educational values, learning how they may be best used for the education of the young, studying the psychology of the child and the laws of his development, trying to solve the larger educational problem, and incidentally the problem of sloyd education therein contained? Or shall he, having secured a fair general education, with some knowledge of pedagogical theory and the work of the teacher — shall he give a year or two of intensive study to the special problems of sloyd in a school where sloyd is the dominant interest, and where it may be studied with the thoroness and single-mindedness which the enthusiast demands? These questions are not applicable to sloyd alone. They may be asked with regard to other so-called "special" subjects — music, drawing, gymnastics, etc. And perhaps in the case of each of these special subjects, certainly in the case of sloyd, considerations on each side are severally so strong that it is not easy, probably as yet not possible, to give a categorical answer. Permit me to indicate the points of departure of the argument and some modifying considerations which we must bear in mind.

We must begin with the child and his needs, as indeed the pedagogy of the day rests primarily upon a study of the child. What light does a consideration of his needs in the school shed on the question? It tells us, for one thing, that there should be a unity in his program of daily work. He divides his time between reading, number work, science study, and what not, but these must not be utterly disconnected with one another and his day's work disjointed. He should study, not half a dozen isolated subjects, each stealing interest and attention from the others, resulting in a distraction of effort and dissipation of strength, but a series of topics varying greatly, but having real and significant relations with one another — relations which the child himself in some measure appreciates — so that one study lends aid to another. This essential and pervading unity in diversity must exist in the mind of the teacher, else it cannot exist for the pupil. The connections between the different subjects are not so obvious that he who runs may read. They are oftenest not superficial, but deeper-lying, and are appreciated, not so much when mentioned only or

pointed out, but when made vital and real by habitual recognition in the daily work. The teacher of any subject, then, must have been thoroly instructed in all the subjects of the curriculum and in their interrelations. And to this end he must have studied them as parts of a harmonious whole, not as isolated topics. There is, then, a marked advantage if the sloyd teacher has made his professional preparation in a school with a complete curriculum, in which sloyd occupies its normal place and sustains its normal relations with the other subjects.

We cannot, however, leave the subject here. It does not necessarily follow that sloyd teachers should make their preparation in the regular normal schools. In the first place, not many of our normal schools are now giving sloyd instruction, and other facilities for such teaching are still needed. But more than this is true. Special schools for the training of sloyd teachers are not only a necessity until the work is taken up by enough normal schools to satisfy the demand, but they must do a work which the normal schools cannot do. For the present sloyd is comparatively a new subject. Those who wish to teach it have themselves had no sloyd instruction as children. The subject is entirely strange to them. They need a longer course in sloyd and a fuller exploration in this field than in the other subjects of the curriculum. With these they have already made acquaintance, and in them they have already attained proficiency. The would-be teacher needs to study such subjects, for the most part only professionally, in order to learn what their pedagogical value is and to study methods of teaching them. Sloyd he must learn practically as well as professionally. He must master it as a new subject, must himself acquire skill in it, must begin as a tyro and cover the whole course, and at the same time he must study it as one who is to teach it. Either a disproportionate prominence must be given to sloyd among the usual normal-school subjects, or we must have schools in which this may be done. The former alternative — giving special time and attention to sloyd in the regular courses — is undesirable as destroying the balance of topics and time in the curriculum. Not many of our normal pupils desire to become special teachers of sloyd, and it would be unwise to construct our normal courses to meet the needs of the few. The alternative is to provide those who intend to teach sloyd with the opportunities available in a special school.

Moreover, the subject itself needs the special study which is possible only in a special school. There remains still much to be done in mastering and applying its principles, in further adapting the system as we now have it to the conditions of today's schools. There are needed the special laboratory and library facilities, the larger opportunity of time and interest, the greater concentration of thought and effort, undisturbed by other interests, which are the strength and the *raison d'être* of the special school. The still unsolved problems of sloyd and manual training must be largely worked out in these special schools.

What ideal of a manual-training teacher should these schools, and for that matter all training schools, hold up? Is special emphasis to be laid upon the mechanical or the pedagogical side of the work? The old question, Do we want a mechanic or a teacher in the school shop? is now uniformly answered by saying that we want a teacher. We want a man who understands how to teach. We want an educated man, who will command the respect of his pupils for his refinement and culture, for his habitual use of correct English, for his interest in things intellectual, for his unfailing courtesy, for his loyalty to principle, and for his nobility of character. Yes, he must be a teacher — everything in education and culture and character which we would have any teacher be. But this answer, while good, is not complete. We do, indeed, want a teacher, but a teacher who is also a mechanic. He must be a master of the mechanical work in which he seeks to give instruction. We never think of tolerating any deficiency on the part of the teacher in any other subject. Imagine a "good teacher" trying to teach arithmetic and blundering in his figures, or taking a class in Latin and constantly getting his forms wrong! Educational mechanics must be workmanlike in order to be educational. The boys must thoroly and spontaneously respect the workmanship of their teacher. He must be a good cabinet-maker if, as a teacher, he is to be a good character-maker. If his work in the shop does not command their respect and admiration, if it is amateurish, if it is inaccurate and shackly, no amount or variety of attainment on his part in other lines can avail to command and hold their respect. His work must be good, and he must exact good work of them, teaching them on their part to be content with nothing less. Bungling, careless work is neither educationally nor commercially worth the material wasted on it. Here we want nothing less than the best. The following suggestive sign was once displayed before a grocery store: "Absolutely fresh eggs, 25 cents a dozen; fresh eggs, 20 cents; eggs, 15 cents." It is recorded that the grocer readily sold out his twenty-five cent stock, but at the end of the day had his "fresh eggs" and "eggs" still on hand.

The preparation of teachers for our more advanced shop-work — the more difficult wood-work, the work of the forging-room, and of the machine shop — must doubtless be made either in schools of technology or in such training schools — like Teachers' College of Columbia University — as offer sufficient accommodation for the mastery of this work. Both kinds of schools have their peculiar advantages. In the training school attention is directed largely to the educational value of the various exercises, and a study is made of the pedagogical principles on which a manual-training course must be constructed. In the technical school the door is open to a wider view of the mechanical principles practiced in the shop. The student is alive to the tremendous importance, in civilization and industry, of the practical arts whose elements he is acquiring. The

polytechnic student, gathering his shells upon the beach, is conscious of the mighty ocean of industrial enterprise which rolls before him, as the student in the training school cannot be. The former appreciates, as the latter cannot, both the comparative inadequacy of his own school attainments in handicraft and also the transcendent significance of these few elementary processes as the foundation of the mighty structure of mechanical achievement. His outlook into the industrial world makes him truly wise and truly humble.

My subject is "The Teacher in the Manual-Training School," and so far I have spoken only of the manual-training teacher. He is usually thought of as the characteristic feature of the manual-training school. The public is, indeed, vaguely conscious that there are other teachers in the school, but when the words "manual training" are heard, the average citizen thinks of carpenter's bench and blacksmith's forge. Let me, then, say plainly that in a manual-training school there are also teachers of history and mathematics, German and science. And we may well pause a moment upon the function of these teachers, for their work is not, in all points, identical with that of teachers in schools without manual training. They must deal with a larger variety of interests. They must recognize ambitions and life-plans different from those they have been familiar with. The problem of discipline is doubtless much easier for them, but they have fewer idlers and triflers to deal with. Among the larger proportion of serious-minded boys and girls that fall to their charge there are necessarily many whose views are narrow, and whose aspirations, while not unworthy, need clarifying and ennobling. This is both the divine privilege and the difficult task of the teacher in the manual-training school. For one of the glories of manual training is that it often awakens otherwise unresponsive souls, and wisely to direct a wide-awake soul is a harder task than to watch over a sleeping one. But, if harder, how much more inspiring, and with how much greater reward! All the tact and sympathy and wisdom in the world are needed, not to check the abounding activity and ambition of the boy, but to chasten them, to direct them in right channels, to detach them gently from lower, ignoble things, and to fix them on things above. The fact is that in a manual-training school the teacher of academic subjects is simply compelled to keep the interest and profitableness of his work up to high-water mark. The student has a keener zest in all his work, and every teacher must meet and satisfy this awakened interest. Greater activity on the part of the teacher, a firmer grip on the subject-matter of the lesson and on the course of the recitation, a more alert watchfulness to guide and direct — these are necessary, if the restless mental activity of the class is to be profitably employed.

A greater intellectual catholicity is demanded of the teacher in the manual-training school — a truer understanding of the other branches,

mental and manual, of the curriculum, and of the relations between them and his own. The instructor in book subjects must know something of the aims, methods, and attainments in shop-work in order to be able to avail himself more fully of such shop material as can be used in his recitation. He cannot deal intelligently with the boys and girls before him unless he has some intelligent and sympathetic comprehension of their work in the shop, which occupies so large a part of their day and interest.

Why not make my statement more comprehensive, and gather under this responsibility all the teachers in the manual-training school — for in no other school is conscious effort for co-operation more needed? Of course, no company of teachers working with the same body of students can accomplish much of good without a large degree of co-operation. But in the case of the usual academic subjects much of this takes care of itself, because of the already recognized relationship between these subjects. The most isolated teaching does not prevent history and science from helping English, and English and Latin from helping each other. But the subjects and activities of a manual-training school are superficially so diverse, their relations (to many of us at least) so unfamiliar, that a more conscious and more sustained purpose is needed on the part of all to hold them together and secure unified action. Here, then, most of all, is a full understanding among all teachers of the school necessary. Look not every man on his own things, but every man also on the things of others.

The manual-training school asks much of teachers. It does not break them down with heavy burdens, nor weary them with a dull round of daily drudgery. But it gives them tasks demanding wisdom, tact, alertness, breadth of view and sympathy, readiness in dealing with life. In such a school, rather more, I think, than in most schools without manual work, the teacher must prove himself master of vigorous and growing life-forces. Higher generalship is needed. The teacher must do more of what is, I believe, called team-work. School problems here are rather more complicated than in other schools, and are attacked from more directions. But the teacher's reward is proportionately greater. He has the satisfaction of knowing that the boys and girls before him are in earnest; that his relation to them is vital; that they come to him because not only their parents, but they themselves, want what he can give. What they get from him they expect to keep. They expect to "use it in their business." I do not mean to imply that these rewards are not for all teachers as well. But I do believe that to the teacher in the manual-training school, above his brethren in other institutions, is given the reward of greater present recognition and gratitude, and a larger permanent influence over the characters and the lives of his pupils.

THE EDUCATIONAL VALUE OF METAL-WORKING

BY VINTON S. PAESSLER, PRINCIPAL OF BARLOW SCHOOL OF INDUSTRIAL ARTS, BINGHAMTON, N. Y.

This world has been most wonderfully furnished with every good thing. The only bar to its fullest enjoyment is our lack of that inexpressible exaltation of mind which we call appreciation. President Raymond of Union College says: "Education is the development of the ability to appreciate and choose the best things." The *end* of education always remains the same. The *means* of attaining this end are not so clearly defined. There is nothing constant but change, in environment as well as in our knowledge of the development of the mind. Invention and discovery crowd each other. Each new day sees the problem of civilization growing more complex.

In the midst of all these perplexing scenes stands the *alma mater* looking kindly down upon her children. Her first duty to them is to help them to help themselves, building carefully "precept upon precept, precept upon precept, line upon line, line upon line, here a little and there a little," carefully adapting the subject to the capacity of the pupil taught.

When the educational mind is able to assimilate every new discovery and make the proper co-ordination or subordination for every new invention, choosing with intelligent discrimination that which is best suited to the educational end, thus reflecting the best and most important thought along every line, then shall we have an educational system subservient to the highest weal.

The world today wants men. They are wanted to do something. Education must contain an element of severe personal conflict and victory, patiently asking, seeking, knocking. Let education cost as much as it will, it cannot cost as much as illiteracy or ignorance. Today in free America ignorance is a crime.

Last year, at Washington, President J. M. Greenwood, in the early part of his address, asked the question: "Have we not done wonderful things with coal, iron, the vapor of water — with chemistry to paint our pictures and electricity to talk for us?" This afternoon we can ask the question this way: Have we not done wonderful things with metal, and has it not done wonderful things for us?

Without metal, and with nothing to take its place, we should be in a more pitiable condition than were the aborigines without a piece of steel to strike a fire. What has happened is this: metal has conquered the proud forests and turned the timber into lumber. The lumber has

become furniture, houses, barns, fences, wagons, bridges, etc., and without the aid of saw, ax, and chisel, brace, bit, and plane, all tools of iron, "was not anything made that was made." But for the keen edge of steel and strong fingers of metal, nations would perish for want of food. Metal is the conveyance by which science most largely travels on expeditions of investigation and discovery. Eliminate the metal in inorganic chemistry, and two-thirds of it is gone. Without its aid in physics nothing could be done. Electricity would not talk for us, nor give us light and heat. The schoolhouse itself would fail, the industry of the world would perish for lack of tools with which to do her work. Without metal the wheel of progress would cease to turn. In all lines of work in this physical world we, like the spokes in the hub, are held in our place in civilization by a band of iron, and revolve about a shaft of polished metal. Our cities are a perfect network of water-, gas-, and sewer-piping; telegraph, telephone, and electric-light wires; street railroads and trolley lines; while the ocean cable and the ocean steamer make of the nations of the earth one grand family. The fine adjustment of the little microscope makes possible the revelation of our tiny friends and minute enemies. The great telescope, operated by its finely adjusted driving-clock, permits us to visit our big neighbors far and near.

Metal-working is the parent industry to which every other industry primarily owes its existence. It is the one industry that makes America great in the eyes of the world today. It is the bone and sinew of our civilization. Old England admits that her Yankee cousins are ahead of her in railroad locomotive science, and our shipbuilding is not far behind that of the mother country.

In metal-working, as in every other profession, the increasing demand of the age requires wide study and incessant toil. The corrosion of ignorance in any vocation causes a blight. Today we are expected to know and appreciate much that is outside of our immediate fields of action. This is necessary to the stability of our social organism and that self-respect which is the noblest garment with which a man may clothe himself. Helpless dependence has always lived in gloom and traveled on a rough road. "Eyes they have and see not, ears and hear not;" with clumsy fingers and stumbling feet life is a burden and its just reward defeat. Mother Nature successfully reveals her secrets not to these. They are given to those who can appreciate and develop them. Metal-working is necessary to an appreciation of the wonderful furnishings of this world and the growth of our civilization. Skill and art in metal-working have always been so necessary to human existence that it is impossible to discover when the metallic thread began to be woven into the web of progress. In Gen. 4:22, 4,000 years B. C., we read that Tubal-cain was an instructor of every artificer in brass and iron, thus giving metal-working

credit of having the first recorded teacher. In 1500 B. C. civilization had so far advanced that the barber's razor was used.

John Fiske in his *Discovery of America* says:

> In the period of savagery hatchets and spear-heads were made of rudely chipped stones. In the lower period of barbarism the chipping became more and more skillful, until it gave place to polishing. In the middle period tools were greatly multiplied, improved polishing gave sharp and accurate points and edges, and at last metals began to be used as materials preferable to stone. . . . . Toward the close of the middle period of barbarism the working of metal became the most important element of progress, and the period may be regarded as ending with the invention of the process of smelting iron ore. . . . . The upper status of barbarism, in so far as it implies a knowledge of smelting iron, was never reached in aboriginal America. In the Old World it is the stage which had been reached by the Greeks of the Homeric poems and the Germans in the time of Cæsar. The end of this period and the beginning of the true civilization is marked by the invention of the phonetic alphabet and the production of written records. This brings within the pale of civilization such people as the ancient Phœnicians, the Hebrews after the exodus, the ruling classes at Nineveh and Babylon, the Aryans of Persia and India and the Japanese. But clearly it will not do to insist too narrowly upon the phonetic character of the alphabet; where people acquainted with iron have enshrined in hieroglyphics so much matter of historic record and literary interest as the Chinese and the ancient Egyptians, they too must be classed as civilized.

This very brilliant classification, from a purely historic point of view, showing the stages of progress keeping company with metal-working, surely fits our subject very closely by showing the educational value of metal-working.

If we compare the nations of the world today, we shall have little difficulty in discovering that the nation having the highest degree of civilization leads in invention, discovery, and commercial prosperity. But is commercial prosperity necessary to the ideal civilization, or does it only indicate it? What has industrial success or depression to do with what stands for weal or woe? Are all of these great interests in their various forms independent of each other, or do they combine to make a nation strong or weak? If they do make a nation what it is — and I believe they do — what should be the points of contact between the life within the school and the life after leaving school? In other words, does education today successfully prepare for the voyage of life? Does it study the map of progress, and is the pupil brought closely in touch with the large possibilities and opportunities of successful living?

The educational value of metal-working is the impression received and the developed appreciation of power to control matter. It is positively asserted that boys make better business-men in consequence of having their quickness of practical perception and ability to do developed. This is not to be considered utilitarian in any sense. Each individual should become his own great opportunity by studying to show himself approved, "a workman that needeth not to be ashamed." An education for the sole purpose of making a living is like the cry, "Rags! Any

old rags or bottles!" while an education to live reaches out to a soul's bright home.

In 1894 Dr. G. Stanley Hall said that as a boy he was brought up on a farm among old-fashioned industries, and he was justly proud of the many things he learned and could do. He said:

> I can mow; I can milk a cow, and know the right side, which many an artist does not; I can whet my own scythe; I know how to make a garden; I have woven a piece of cloth, or helped to do it, all myself. . . . . I can plant, chop, butcher, team it, cut ice, etc., make cider, maple sugar, fences, and stone walls; and all these things have stood me in useful stead in the laboratory, where a man must know how to do a little of everything.

Later, in Germany, he took a dozen lessons in bookbinding and a half dozen more in glass-blowing, and in 1891 or 1892 he found a gold-beater in Boston who gave him some lessons in the fine points of gold-beating.

This is only a little patch in the life-progress of one man. We will call it uncultivated nature study extended to a study of metal. But just here apply some good educational-efficiency-recording device and see how much soul-expanding, how much thoughtful appreciation, how much power of adaptation has taken place in the evolving life-process! Now, you cannot teach a boy how to drive a nail by placing him in a chair and lecturing him. He must have the hammer and the nails. Then he is happy. He wants to drive nails everywhere. He wants to know why they go in. He wants to have you see him do it. "Did God make the nails? Where did the hammer come from?" Then he wants some big nails and a few more little ones; he needs them for so many things. Let me tell you a secret. I believe he does need them that certain brain cells which otherwise would not be developed may be developed. Tell him about screws and give him some, and a screw-driver. You cannot begin to answer all his questions. Again, let him see you file a piece of lead, a piece of brass, a piece of iron, a piece of steel; let him do it for himself; then listen to his questions: "Why is the lead so soft? Why is the steel so hard? Will the file cut my knife, or will my knife cut the file? If the file will not cut my knife, how and why does the whetstone sharpen it? Is the whetstone stronger and sharper than the file?" A couple of months ago a large kindergarten class came into our forge shop. They looked at everything, they wanted to know everything. Some of them tried to bend a piece of iron, and did bend it when it was heated in the center. Then when it had cooled they tried to bend it back, but could not until it was heated again. "What have the children learned?" do you say. Very surely nothing that they will be compelled to unlearn, and their souls have been helped to expand as surely as the sparks fly upward. Again, let the children see how smooth a sharp, thin knife will cut soft pine; then heat it red-hot, and when it has cooled slowly try to cut another piece of pine, and compare the pieces so cut;

then show them the knife with its bent and ruined edge. They will recognize the injury the knife has sustained, tho they do not understand it. At this time that is unnecessary. Why, someone a short time ago asked Mr. Edison, "What is electricity?" and the great electrician answered, "I don't know."

A little knowledge of metal-working is necessary to successful wood-working. The pupils in the joinery class should know how to sharpen and keep in order every one of their cutting tools. If the condition of a tool specially adapted by its form to do a certain class of work is not appreciated by the pupil, the work done by the aid of the tool will be of little educational value. We must have appreciative *im*pression before we can get good *ex*pression. This thought should extend to every class for boys or girls where tools or instruments are used.

Some will no doubt say that care for tools is not metal-working, just as it is said that wire-work, bent-iron work, sheet-lead development, etc., are simply bending and forming material, and are thus exceptions rather than types of metal-working. Let this be as it may; I believe that care for tools and instruments is valuable, and is as much metal-working as "a penny saved is money earned."

Metal-spinning involves a knowledge of wood-turning where metal forms are not used. It can be successfully done on the ordinary wood-turning lathe, at very little expense; Nos. 24, 25, and 26 sheet brass, copper, and aluminum being good for the purpose. The brass and copper demand frequent annealing. This work cultivates the æsthetic taste and demonstrates the flowing property of metal.

Sheet-metal work opens up a large field for many metals — iron, copper, brass, zinc, tin, etc. — and is valuable for its wealth of development and the skill required in forming, raising, joining, riveting, etc., and involves a good knowledge of drawing and descriptive geometry.

Chipping and filing are valuable, as they prepare the way to a proper understanding of the form — quality necessary to metal-cutting tools, besides giving training in that skill so necessary to a correct and easy position when using hammer or chisel, file or scraper. Only those who have experienced the exacting demands of die-sinking can fully appreciate this work.

In machine-tool work the boy who successfully makes a dynamo, wrapping the armature and magnets, building the commutator, and adjusting the brushes, has a greater sense and appreciation of power than the boy who, like a machine, must be operated. The same excellent and valuable results may follow the careful construction of any one of a multitude of small machines or mechanical appliances, illustrating broad principles of mechanical construction and engineering practice.

When we come to hot working, we at once recognize an old friend in the blacksmith who, being a man like Elihu Burritt, has become an actual

teacher of large value. When once a boy catches the spirit of this work, carefully solving each problem, taking account of each necessary operation and the best way to accomplish it, then striking intelligently, and at the right time and in the right place, while the iron is hot, he has learned one of the foundation principles of the secret of success in every life-work.

Pattern-making involves a knowledge of foundry practice, not only in drawing the pattern from the sand and of the position the same should occupy when being poured, but also of the possible warping and positive shrinking, with due allowance for finishing certain parts in the machine shop. Every pattern is a problem peculiar to itself, and is valuable as it invites a careful solution of all these perplexing details, which find analogy in every walk of our civilization.

To the founder and metallurgist belong some of the greatest triumphs of the metal-worker. "Metallurgy is the glory of chemistry." Today engineering science is the economic application of matter, force, time, space, and motion. In this work mathematical computation occupies so large a place in determining details of complex construction, and gives so perfect a method for recording observations and getting at results for efficiency, that it at once becomes the most powerful and necessary adjunct to the mental machinery of the metal-worker.

"The Use, Design, and Manufacture of Iron in Ornament," beautifully illustrated, showing the early methods of working the iron, also showing the Austrian, German, Italian, French, colonial, and other styles of ornament, each nation stamping its work with its own individuality, may be found in *The Iron Age* of April 27, 1899.

When it comes to a carefully graded course in metal-working suited to the just need of our schools, showing the steps and value of each, we will expect large things from the New England Association of the Teachers of Metal Working, lately organized.

I confess I like to see young men growing enthusiastic over their power to work metal into forms of beauty, grace, and strength; to appreciate good tools and their use; and the ability to choose and do those things which make a man a man. A good course in metal-working, worth much for the knowledge it promotes and more for the broad-minded, well-established, independent manhood it makes possible, is today almost a demand.

CONSTRUCTIVE WORK IN THE ELEMENTARY SCHOOLS

BY MISS GERTRUDE E. ENGLISH, PRINCIPAL OF THE FARREN SCHOOL, CHICAGO, ILL.

The average child suffers from some form of repression. The self-control which regards the rights of his fellow-beings can never be acquired by the child thru the exercise of the will of another individual. Even tho the little one needs guidance that his development may be complete, the direction must be intelligent. The necessity for foot-covering does not excuse the torture inflicted upon the Chinese girl; this accepted plan for keeping her in her proper sphere will not continue to be effective if the repressive measure continues to be the sole reliance of her directors. The child who has some of the joys for which his soul longs, offends less frequently than he who is constantly denied. Forbidden fruit looks ripe and sweet; forbidden paths look cool and shady. The child who is permitted to taste some of the fruit, to test some of the inviting walks, learns to discriminate to his own satisfaction; he does not harbor the unspoken resolution which frequently causes a volcanic eruption in the family, in society — the resolution that he will try the forbidden experiment when he sees the opportunity. If a strong child is denied motor outlet, the results are serious either to his neighbors or to himself. The weak brother always suffers thru repression.

In the schoolroom some children find a means of expression in drawing. Especially is this true since color has been used so freely in the elementary schools. Dramatic representation is an outlet which appeals to a large number. Much might be said in regard to improvement in oral and written language, our main dependence for expression; music may be made an ideal channel from the heart to the listener. But handwork, begun in the kindergarten with so much joy, and resumed in the manual-training classes, is frequently neglected in the elementary schools, the teachers in which cannot afford to miss so potent an aid. The image secured by the pupil must be objectified for comparison, and correction if necessary. Objectification in words only creates a habit of adopting the teacher's expression, which screens the poverty of the image and precludes the possibility of genuine criticism and consequent growth. Teachers who secure genuine expression in the composition class are the first to welcome handwork. They realize that one cannot unwittingly deceive himself when the image, true or faulty, stands before the class, as may occur when the child is glib in repeating set phrases. Moreover, contact with materials develops nerves and muscles; it stimulates the worker to his utmost exertion; it produces in him a satisfaction that

leads to a charming unrest. The resultant paths, being added to the ordinary ones, must give the organism a firmer grasp of its material and result in a more certain recall of the image.

Society, in a blind way, demands some hand-training for our youth. With the rise of modern conditions in the industrial world, the opportunities for hand-training which were enjoyed by the forefathers have receded beyond our grasp. Still, the specialist and the inventor occupy high places among us. How shall we put such of our children as have the ability in the way of occupying these places? Surely not by permitting a dormant stage to intervene between the kindergarten and the manual-training or technical school age. The elementary school can offer no adequate excuse for neglecting the opportunity to direct a part of the abundant physical ability into the line of free manual training. This free work should follow closely upon the steps of the work encouraged in the kindergarten; it should reach out into all the lines beneficial to the middle-grade children; it should overflow into the grammar grades, and gradually diminish as the muscles grow sufficiently strong and the nerves sufficiently steady to permit the pupil to undertake the more closely directed work of the manual-training department. It should give the kindergarten a note of freedom by discouraging set patterns marked by fine stencil outline; it should inspire the manual-training people to leave something to the individuality of each member of a class. Many a child fails in manual training because he is not ready for the necessary analysis; he has no idea of accuracy of measurement, nor of the necessity for such accuracy. The impulsive movements toward making, the failures, the renewed efforts, should not be forbidden when the age of six years has been attained; they should be encouraged to grow more definite as the child's development demands definiteness. The abject helplessness of the average child in the presence of new conditions is pitiable. The boy who has been obliged to make things for himself is a monarch beside the one for whom the finished product is always provided. The latter resents any suggestion in regard to self-exertion, and practices destruction rather than construction.

In this free constructive work the teacher should present wholes rather than parts. After the object has been presented and its uses pictured out, the class should be left to develop its own expressions, which should not be expected to conform to a model. The faulty expressions are frequently of greatest value. Thru them the young unconsciously give us the true state of mind in which they exist; happy the teacher who can suggest the correction without wounding or causing self-consciousness. The true measure of a teacher's ability is the power to promote growth, to give to the hungry little ones the food that they can digest. The realization that this is the standard will free the teachers from the fear of permitting a mistake to appear in public.

As in all school work, so in constructive work, the interests of the child should be consulted. Strict formulation into a course of study will kill it. It must be free, as must be the child's hands; it must shift with his changing interests; it cannot be the same in all cities, nor in all quarters of one great city. The inventive and original teacher can here find scope for her talents, for the heavy hand of over-direction must not be laid upon her. Its spirit of freedom, its sympathetic relations with the child, its illumination of all school work place construction in an important position. A class reading of primitive man may wish to construct a cave, stone implements, a mill. Hiawatha's admirers run riot among wigwams, canoes, moccasins, deerskin coats, bows and arrows. Children interested in Greek myths love to dramatize the stories. Classes in geography interest themselves in a knowledge of the textiles of a country to the extent of spinning and weaving. A loom is readily constructed, warp and woof distinguished, plaids, stripes, and twilled effects produced. A rug after the pattern of our grandmothers' rag carpets, and composed of contributions from all the members of the class, fits the floor of the log hut made of twigs as an illustration of the habitations of the early settlers. Sod houses, dugouts, and adobé habitations would interest many children whom I know. Carpenter's *Asia* gave one class the impetus to make the jinricksha, the Chinese wheelbarrow, the street lamp, the counting machine. The appearance of a pretty white flag bearing upon its face a scarlet circle led to the revelation that some of our enterprising children had been calling upon one of the foreign consuls. The algebraic theorems bring objective work in both two and three dimensions.

Frequently an occasion or a holiday gives the note for the work. The presentation of *Ivanhoe* or *The Merchant of Venice* creates a demand for costumes, scenery, and accessories, the meeting of which furnishes scope for research and invention. A patriotic celebration may lead the older children to make ten- or twelve-foot flags of good bunting, the younger ones to make small flags or paper frames for the pictures of the heroes. Magazine pictures make dainty passe-partouts for Christmas or birthday gifts; a turkey cover for the Thanksgiving composition vies for favor with the cover made to represent a pumpkin; hearts come out for valentines and curious calendars for New Year's Day. The sight of a set of books whose dresses were worn out made one class hasten to cover them in a substantial board covered with attractive paper. After good magazine pictures had been mounted, a portfolio was made for their protection. When the children desired to preserve their compositions and the accompanying reproductions from the masters, they made their books. Linen covers, daintily ornamented, add to the value and lead to the preservation and subsequent re-reading of the cheap pamphlets in which so much good literature is now available. Illustrations

pasted in do much to help this interest. A small paper pocket pasted on the inner side of any book cover reminds the reader to collect scraps of information bearing on the subject of which the book treats.

At the risk of being monotonous I repeat: No perfect, finished product should be expected; two schools, nay, two rooms, two individuals, should not be required to make the same object in exactly the same way; a teacher should not settle upon doing the same work with the same grade for two successive years. Accuracy should be approximated as the children grow older; use and interest should be the twin guiding stars in selecting from so rich a field.

Teachers frequently feel that the large number of pupils assigned to a room, together with the difficulty in securing implements and materials, stands in the way of such work as I advocate. I am convinced that the introduction of material into the schoolroom will operate to the advantage of both child and teacher in reducing the number assigned to each teacher. Neither kindergartner nor manual-training teacher will attempt to direct sixty children at one time. Why should the grade teacher be compelled to crush out all individuality by attempting what the specialists are wise enough to declare impossible? Some expenditure for tools is inevitable, but the money is well spent. The children should be encouraged to bring some implements from home, and to utilize material often thrown away. Some geography classes have macerated refuse paper and produced a creditable array of papier-maché maps. Old magazines furnish the material thru which the little folks gain control over the blunt scissors. After this they may cut animals, people, Hiawatha with all his trappings, from brown paper upon which lessons have already appeared. Neatness should be inculcated by requiring each child to care for his own scraps. Small children love to model in clay, and some of them bake the products and even ornament them in color. Most of the work should become the property of the child who made the articles. His envelope is needed for his pictures; his fiber or paper basket holds his pebbles; his bag holds his marbles; his purely imaginative work may occupy the place of honor in the home, and bind the hearts of his parents to the teacher who has taken such interest in the child. In the upper grades wonderful stained-glass effects are produced by pasting bits of colored tissue paper over a cardboard framework cut out to resemble a cathedral window. In connection with English history some classes have produced models of the great English minsters.

After the little child has learned to handle the scissors, a box is a good object for him to make; he marks off and cuts out a square inch from each corner of an oblong piece of cardboard, turns the projecting pieces up, and pastes them together. This foundation, varied in size and shape, and covered with suitable paper, forms tray, box, or cover. The making of the clock face is a valuable exercise. The child attempts to

cut the circle and finds the resulting form not round. Show him how to make a circle-marker, and let him make circles two inches in diameter, four inches in diameter, and one- and three-inch circles. After marking his clock face and contriving hands, he can practice all the arithmetic which can be expressed with numbers to sixty. The ambitious may make an ornamental mounting for the clock face.

The danger in grading the constructive work rigidly is great. Several grades may be interested in a line of work at the same time, the older children making looms and the younger ones using them. Frequent readjustments and wise correlation are necessary. A triple alliance with the kindergarten and the manual-training department should be the aim of those interested in the promotion of handwork. In comparatively few schools is there an equipment for sloyd; the older children are favored more generally by arrangements for manual training. I would appeal to all teachers of handwork to keep in mind the great gulf which yawns in many communities after the child leaves the kindergarten and before he reaches the manual-training grades, and to join with the grade teachers in bridging it. Willing as may be the individual teacher of handwork to meet the grade teacher and give the pupils what they really need, the manual-training course often widens the gulf. I would suggest that a more careful consideration of the physical condition of the pupil, insight into his mental advancement, and an infusion of the spirit of freedom into the aforesaid manual-training course will build a goodly share of the spans. Many of the teachers in the seventh and eighth grades realize that a knowledge of elementary physics and a few facts of chemistry would be valuable to their pupils. The lack of apparatus is deplored, when all the materials for the construction of the apparatus can be secured at small expense or rescued from the junk pile. After the pupils learn how to cut lamp chimneys and glass tubing, these cheap materials may be utilized in many experiments. I have seen several good barometers made by children, and the work in heat, light, and electricity is positively charming to a majority of them. I have yet to meet the boy who is too dull to appreciate the lever, the wheel and axle, or the pulley. With the working out of such apparatus many a boy will occupy leisure which, especially in large cities, might prove to be Satan's opportunity. In many cases the fathers have been proud to assist in a work which they fully respect and into which they can enter with zeal. In response to requests some schools have been supplied by the patrons with small printing presses, and the boys give liberally of their spare time in order to keep all copy cleaned up.

Thru handwork the senses are trained by contact with materials which are being used for a definite purpose. We do not consciously use the senses as ends in themselves; we delight in sight because we see the beautiful and kindly surroundings; touch for the sake of touch, hearing

for the mere purpose of assuring ourselves that we can hear, are tiresome and nerve-racking; but the texture of fine materials suggests their uses, the comfort and pleasure conveyed by them; the sound of magnificent harmonies uplifts us, the cathedral bell calls us to worship. The child shows his kinship to the man by resenting the exhibition of his sense acuteness. But his interest in such training may be maintained if the objects upon which his senses react are genuine. Unconsciously he gains familiarity with the form, size, and color of objects — a knowledge of the utmost value to man, indispensable if he is to enter the arena of commerce, manufacturing, or transportation. The bond of sympathy formed between home and school by interesting the parents in articles made and taken home repays the teacher for all her efforts.

From construction work the child gains many facts of number which might otherwise be merely forced upon him. Few boys fail to realize that a flock of pigeons has been invaded or the marble bag looted. A boy who failed utterly to grasp the number work according to the Grube method learned the money of England, France, and Germany in a few months. Personal interest in the problem results in the eradication of the number struggle. Better than the number ideas are the ideas of concrete geometry secured thru judicious constructive work. The circle, the square, the parallelogram, the triangle, the pentagon and hexagon; the relation of triangle to square or parallelogram, of equilateral triangle to hexagon, of the side of the latter to the radius of the circle; the surfaces and edges of solids; all these and many other ideas may be gained while the useful and interesting article is being constructed.

Constructive work may be used to preserve the children from a dull inertia and keep alive in them the desire to do which is characteristic of the little child. Manual-training teachers, grade teachers, is the work not worth the effort?

DISCUSSION

Mrs. C. L. Place, principal of the training department, State Normal School, San José, Cal.— I wish to express my hearty concurrence in the ideas and principles of Miss English's paper, and to express myself with reference to what seems to me the next step before the manual-training people.

We who are looking about for the best things for the child's development along constructive lines are confronted by many systems, the advocate of each being sure that his is altogether right educationally.

We have been told from time to time that the child is the center of our interest, that a study of his needs will answer our questions; but it is only within a few years that this study has been placed on a scientific basis; and already in several lines of the child's development we have some laws on which to base our work. This investigation has proved the necessity of constructive work; has, in a broad way, indicated the character of

such work; but the field has hardly been entered. Inductive studies by questionnaires and by experiments scientifically conducted must be made to determine the reaction of children on their environment along constructive lines. Studies of race development and studies of individual children give us hints which must be supplemented by thoro scientific work. We must ascertain whether the logical order of procedure, as laid out by the manual-training scientist, is the pedagogical order of the child's development. This has been shown not to be true in many lines of school work. We must strive to ascertain the periods during which the child works most profitably with the different materials and tools; when he prefers toy-making to articles of larger scope and general use. We must find the ratio between imitation and original work that will best advance the child's normal growth.

Until this broader pedagogical basis is taken, constructive work must remain imperfect and empirical, instead of being an integral element of the child's development.

CORRELATION OF MANUAL TRAINING WITH OTHER BRANCHES OF STUDY

BY JAMES E. ADDICOTT, DIRECTOR OF MANUAL-TRAINING DEPARTMENT OF STATE NORMAL SCHOOL, SAN JOSÉ, CAL.

Manual training, as treated in this article, is recognized as a fifth branch of study, which, if properly adapted to the teaching of the other four great branches—language, science, history, and mathematics—is destined to become one of the greatest educational factors in correlating all lines of school work. To this end we advocate the training of the bodily powers as well as the mental; not only that the student may have the opportunity to do something better, but that he may thereby think something better.

The physical activities involved in the making of a series of manual exercises, pedagogically arranged, may be highly educational by bringing about decidedly strong mental reactions.

Altho manual training has proved its educational, industrial, and moral value, there are still great obstacles; for this subject is applying for a place in all departments of our overcrowded course of study. We are told that this ponderous public-school system, assisted by poor light, vitiated air, heavy tasks, and long lessons, is subtly causing the physical, and consequently the mental and moral, degeneracy of our American youths. Why, then, increase the burden? Now, manual training does not mean longer hours, more nervous students with weaker eyes, curvature of the spine, etc.; but it is intended to obviate these tendencies by allowing the student to learn thru healthful manual exercises many of the lessons which he ordinarily tries to learn in that silent, motionless school-room style of book studying.

As an educational factor manual training means that the abstract

thoughts of other branches may be made clear and comprehensible by supplying concrete work. At a recent meeting of the National Educational Association this department defined manual training as "the transforming of materials by working with tools, in accordance with principles fundamental in the industrial arts." This definition is narrow and inadequate, as it recognizes only that line of handwork which involves the use of tools. Manual training has a broader significance, including many of the theories of Froebel, the teachings of Comenius, the principles of Locke, and the methods of Agassiz: it includes all lines of school work wherein the hand is a necessary factor in the acquisition of knowledge. It is a method rather than a subject; that is, its methods do not belong to a series of hand exercises only, but should influence the whole school curriculum. In elementary schools especially manual training should be correlated with as many subjects as possible, by giving the student a physical experience as a foundation for his mental concepts; thus affording a better opportunity for *im*pression, which is certainly more desirable than the student's usual delusive *ex*pression. Let us illustrate by the two methods of finding the areas of circles. The shorter and easier way is to use the formula: radius squared multiplied by π equals area; then substitute the dimensions of the circle, and multiply. The answer obtained is the area. This traditional method illustrates an *ex*pression which is usually minus the *im*pression.

High-school graduates who have finished arithmetic, algebra, and geometry have been known to fail utterly when asked to measure a cylinder and find its volume. Having had no experience in measuring or comparing parts of circles, they do not always know the meaning of π, to say nothing of understanding the formula, radius squared times π.

Manual training rebels against such methods, which give no opportunity for investigating, judging, or reasoning. According to Locke, such work should be ruled out of the schools as not being educative. The great philosopher defines education as "a just and legitimate familiarity betwixt the mind and things."

The student should be led to understand the relation existing between diameter and circumference, by measuring around and across a number of familiar cylinders, before either the name or the definition of π is given. He should also convert a circle of cardboard or thin wood into an approximate rectangle; then measure the rectangle in terms of the circle, and deduce the formula.

In the mind of one who has gone thru this process there is no question as to the meaning of the formula, as its relation to the real circle has been gotten thru personal experience. In this way the rule, the formula, and the theorem are all made the result of thought rather than the subject of thought.

Allow me to illustrate more fully by the use of these charts how

manual training may profitably be substituted for book-work. They represent a course in cardboard mensuration wherein manual exercises combine arithmetic, concrete geometry, and drawing.[1] This work is manual training in its truest sense, affording the student an opportunity to ascertain thru his own experiences the meaning of the rules which are deducted from real things of his own making.

We are told that education consists, not in learning isolated facts, but in thoroly understanding relations. No fact or principle is really learned until its relation to other, more firmly established truths is clearly and forcibly maintained. Now, education in the grades consists mainly in learning valuable truths, but these truths are mere abstractions to one who has not interpreted them in terms of his own experience.

Manual training means the utilization of the physical activities of the student in getting experiences necessary to the acquisition of knowledge. The time has come when intelligent handwork is recognized as contributing to moral and intellectual development, as fully as the older plan of studying books.

With advancing civilization comes a new environment; with this new environment come new necessities; with new necessities should come not only a course of study that will enable the student to adjust himself to his changed environment, but also a corps of specially trained teachers fully capable of selecting the wheat from the chaff, and of correlating important facts and principles thru inductive processes. But where may the prospective manual-training teacher prepare for this important work, which requires the highest professional spirit, as well as special technical skill?

We are told by some that the best manual-training teachers of today have taken their work under Dr. Salomon, of Naas, Sweden; or under Mr. Larsson, his worthy American co-worker in Boston; by others we are informed that the true manual-training teacher has received his instructions in the cities of Germany; and by still others, that all the valuable principles of manual training are to be found in the schools which have adopted the Russian system. Of course, each system has its good points. The Russian system gives the strongest mental training and discipline; the Swedish system emphasizes those rare principles of altruism and utility; while both possess a remarkable scientific sequence regarding both mechanics and mathematics. Of the three, however, the German is probably the most attractive and interesting. Besides these, Mr. Mickelsen, of Copenhagen, and J. Liberty Tadd, of Philadelphia, have developed systems which arrange the exercises according to the muscular development of the student; while Mr. Barter, of England, has "a system which is noted for its lack of system."

[1] The speaker exhibited and explained a series of charts illustrating this phase of manual training.

Where, then, may the prospective manual-training teacher find the most desirable and complete preparation? The fact is that there are few manual-training schools at present affording teachers' courses, for professional work is not a factor in technical manual-training schools. The future teacher should first acquire his professional training in some normal school or university; then choose a technical course that offers the class of work he anticipates teaching. The Teachers' College of New York city is doing a good work in this direction. It is well for the special teacher to study a particular system; but the regular teacher cannot find in a special system (which gives prominence to technical skill) the specific exercises which are required in the grades. Right here let it be said that we cannot expect efficient manual training thruout our grammar grades until we have outlined a course which can be followed at the ordinary school desk and can be conducted by the regular class teacher. In outlining this course care must be taken not to prescribe for a lower grade what has been specially prepared to meet the needs of some higher grade. In some schools the wood-work of the Russian system has been adopted in the intermediate grades with little success; likewise Mr. Larsson's sloyd has been introduced into the fourth and fifth grades with comparatively poor results. The Russian system furnishes the best course for high schools; the Swedish sloyd affords an excellent training for the grammar grades, altho some of the exercises are by far too difficult; while the German cardboard course furnishes many practical exercises that may be adapted to intermediate grades. There are few exercises which the grade teacher can safely adopt in his particular grade just as they are; consequently he must learn to adapt such work as will meet his students' needs and insure their interest. He should adopt little, adapt much, and correlate most. There is too much haphazard work: allowing students to make anything they wish; withdrawing an exercise merely because students are not interested, and substituting another regardless of the students' needs. These mistakes are common in our schools today where "a start" is being made.

All praise and honor are due to those who, against great odds, have thus made "a start;" to the pioneers who have made the way to present attainments.

We cannot, however, condemn too strongly the tendency in some cities to intrust this important educational work to practical mechanics, good cooks, and seamstresses. Censure is likewise due that class of instructors who think a particular system contains all the good, and who see only the bad in other systems.

Let us be progressive without being radical. Let us try to use the good, and only the good, in every system. Let us look at manual training in a broader sense: manual training which not only emphasizes such activities as express thought, but also emphasizes to a far greater

extent those activities and experiences thru which knowledge may be most easily gained. Let us, with a common purpose, work along a line of the increasing variable whose limit is the perfect man. Let us secure the highest attainments for our American youths. The key which opens the door to this broader vision of education is correlation. But the one who turns the key must possess tact, keen insight, industry, and the highest professional spirit; for he must take into consideration, first, the principles of pedagogy; second, the average capability of students from both psychological and experimental standpoints; third, the auxiliary influence of handwork in science, language, and mathematics; fourth, the æsthetic side; and fifth, the cost of material and equipment.

If viewed from the above standpoint, manual training is destined to become an essential, organic part of education. If it is presented as a distinct and new line of school work, it must necessarily take that time which heretofore has been given to other subjects. Altho in many schools definite periods may be assigned for recitations in manual training, still we would recommend that manual exercises have immediate relation to academic work. In the grammar grades, however, where sloyd, sewing, and joinery are taught, it is not essential.

In time we may expect a definite course suited to the work of each grade, but for the present we must be content to select and adapt the best exercises from the various so-called "systems." Experience and educational research, in connection with the growing powers of the student, should determine very largely the various steps in the work of any one grade. The whole course should be systematic and progressive. It is well to have each lesson applied to some object that may be of service in school or at home, provided educational development is not sacrificed. In the higher grades, working drawings should precede each exercise; they should be used below the sixth grade, if the students are prepared to construct and comprehend them. The work of the sixth, seventh, and eighth grades should include sloyd, joinery, and making apparatus to illustrate principles of mathematics and physics.

Drawing with straight edge and compasses should be a specialty in the intermediate grades, where also constructions in cardboard and thin wood involving but two dimensions should be introduced as a preparation for the more difficult exercises of the higher grades. In the primary grades clay-modeling, coloring, paper-folding, etc., should be taught in relation to number and science work.

In selecting material the expense must be considered. Cardboard costs less than wood, and may be used in the third, fourth, fifth, and even in the sixth grade. Clay, sand, paper, cardboard, and wood are the cheapest and best materials. For practical and educational reasons a greater variety is desirable, as by this means the student is made acquainted with the properties of matter and, as President Draper says in his Cleveland report, "the possibilities of a variety of materials."

As a rule, boys and girls should follow the same program; but when the purpose of the course is to prepare for life-work, a distinction should be made in the higher grades. In the Cleveland schools the program is different for boys and girls in all grades above the fourth. In New York schools the girls of the sixth, seventh, eight, and ninth grades are taught sewing and cooking, while the boys take sloyd, joinery, and apparatus-making.

Cooking and sewing have long been considered domestic arts; they are so obviously utilitarian in character that we often lose sight of their educational value. Cooking promises to be a science, and as such could be taught in connection with physiology and hygiene. The practical value of sewing in the home deserves special recognition; its educational side, however, can be carefully developed under the supervision of competent teachers.

In answer to the three questions propounded by Dr. Harris in his circular letter: first, the central thought in manual training is education; second, as far as possible it should train with a direct view to actual work; third, preparation for higher technical study should in all grades be incidental.

Any earnest student of the times must see the necessity for wider knowledge, for a more varied education, for stronger self-reliance, and for far greater determination and power of self-help than have been given by the old methods of education. The population of the civilized world is increasing rapidly; competition is becoming keener and closer. There is a demand for an education that not only gives scholarship, but prepares for citizenship in relation to life-work. We have had much trouble because of workers who will not think; we may have more serious difficulty with the thinkers who will not work. The dignity of intelligent handwork should be appreciated by parents and teachers. We believe manual training in the elementary schools will largely accomplish this end. If the educators of this great republic refuse to acknowledge industry as in every way honorable, and continue to idealize scholarship as the only attribute of mankind worth striving for, we may never hope for that sympathy, that mutual respect, that good fellowship and brotherly love which should characterize Americans.

THE MANUAL-TRAINING SYSTEM OF LOS ANGELES

BY MISS ANNETTE JOHNSON, SENTOUS STREET SLOYD SCHOOL, LOS ANGELES, CAL.

The history of manual training in this city can be told in few words.

The Stimson-Lafayette Industrial School, a charitable institution in which young girls are taught the various branches of domestic science, has been in successful operation for some years.

In the winter of 1894 sloyd was introduced into the normal school here, and instruction has been given in wood-work in several of our private schools in recent years; but it was not until September, 1896, that manual training became a part of the course of study in the public schools of this city.

As an experiment, four sloyd rooms were fitted with from twenty-two to twenty-five benches each, and supplied with all necessary tools, at a cost of about $350 a room.

Instruction was given in each sloyd school six hours a day, the time being divided among four classes. Each class received one lesson a week. This arrangement accommodated all the boys of the sixth, seventh, eighth, and ninth grades, and a few girls — nearly two thousand pupils altogether. It has been found necessary to establish new sloyd schools each year, until now we have nine — one in each ward. One more school is needed in the southwest part of the city, in order properly to accommodate all now taking sloyd work.

As yet manual training has not been extended to other grades, nor has the work been given to girls, except to a very limited number. We hope, however, for the extension of sloyd and for the introduction of cooking and sewing.

It did not take long to learn that our classes were too large for the most successful individual teaching, that too much work was being crowded into one day, and that many of the boys had too far to go to attend the sloyd school. Accordingly, when the new sloyd rooms were opened, they were provided with only sixteen benches each, just one more than the ideal number. The time for each teacher has been much reduced, while the time given to each class remains the same — that is, from an hour and fifteen minutes to an hour and thirty minutes per week.

During the first year of sloyd work we used the set of models that had formerly been in use in Throop Polytechnic Institute, in which school children are given daily lessons. No attempt was made to cover all the ground, but rather to learn how much the average boy could accomplish in the allotted time.

In the light of this experience certain changes have been made from time to time in an effort to hit upon a set of models which should embody all the virtues of the old in a more condensed form.

We now have, for the sixth grade, Course I, containing eight models, in which are taught length, cross, and oblique sawing; turning; length, end, and surface planing; horizontal boring, filing, use of spokeshave, nailing, modeling edges, etc.

In this grade the drawings have but one view. They are made from dictation and from blackboard drawings, which are, of course, on a much larger scale. This thoroly familiarizes the pupil with the use of the ruler, and exercises his knowledge of mathematics. If, for instance, a

boy is told to draw a circle five and three-eighths inches in diameter, he must do some thinking to determine the radius, find that measurement on the ruler, set his compasses, draw the circle, and then verify his work. If he has measured carelessly, or used a dull lead, the chances are that the circle is wrong and must be made over, and that the boy will discover this for himself. He soon learns to exercise care at every step. A sixteenth of an inch means more to a boy who has had a few lessons in sloyd than to the average adult. If the blue print were before him at this stage of his development, he would stand his compasses on that to take the measurement, and draw without giving much thought to it.

Course II, for the seventh grade, contains six models. In addition to the exercises given in the first course, we here have gauging, squaring, whittling, vertical boring, nail-setting, gouging, and modeling with spoke-shave and block-plane.

The drawings in this course have two views, and are made from the model in connection with the blue print.

Course III, for eighth-grade pupils, consists of four models — the nail box, mitered frame, towel-roller, and half-lapping frame. Here are learned the halving, half-lapping, and mitered joints, rabbet-planing, screwing, chiseling, and simple carving. The drawings have three views. The pupils draw from the blue print, using the model when necessary to an understanding of the blue print. The time comes when the pupil should be able to make the model from the drawing alone, as a carpenter builds a house from the plan, never having seen a house like it.

Course IV is designed for boys of the ninth grade. Here are taught dovetailing, and the making of other difficult joints, such as open mortise and tenon, double mortise and tenon with miter, half-blind mortise and tenon with haunch, and many others; and the work in carving is continued.

These four courses are found to be sufficient for the boy of average ability, who receives promotion each term. For the fast workers, and for such as remain two terms in the same grade, other work must be provided. Some boys who come to us have been accustomed to the use of tools at home, and have already acquired considerable skill. For these exceptional cases we have many supplementary models. This supplementary work, by the way, should be selected with care. If left too much to the choice of the pupil, there is danger of his selecting models too far in advance of his work, or so simple as to have for him no educational value.

The boys of Los Angeles, almost without exception, have taken kindly to sloyd work from the first.

Not long ago about 280 boys of the sixth, seventh, and eighth grades were asked to write answers to a set of questions prepared with a view of finding out more definitely their attitude toward manual training. Making all due allowance for the borrowed opinions so often apparent in children's answers, and for the pious little frauds who try to say something to please the teacher, I think we may still learn something from their answers.

Nearly all wanted more sloyd work, but many failed to state how much. A majority thought two lessons a week of an hour and a half each would be about right. Some wanted one hour every day. Several spoke for two whole days each week. A few were satisfied with the present amount. Two boys alone wanted none at all. I wonder if that many boys could be found who would be willing to give up grammar.

One of the questions was: "What is your favorite model?" Here are a few of the answers:

"I like the towel-roller best, because it is most useful."

"I prefer the lemon-squeezer, because I took more pains with it."

"I like the fishline winder, because I can use it when I go to the beach this summer."

"The hammer handle is my favorite model, because I am going to sell it."

"I like the shelf best, because my mother likes it."

"I like all my models, because they will come handy when I get married and go to keeping house." This was from an eleven-year-old youngster in the sixth grade.

Some expressed a preference for certain models because they were pretty; others because they were hardest to make or easiest to make. Several liked certain models because they had sold them to their mothers. The reason most frequently given, however, was "because it is useful." It was gratifying to note that the number of boys who liked best those models which were useful in the home far exceeded the number who preferred such models as were useful to themselves alone.

Their answers to the question as to what good, if any, they expected to derive from the work showed a great diversity of opinions. A few seemed to look upon it merely as a means of recreation. Many said it helped them in arithmetic and in drawing. One little fellow said: "It gives me more 'ackery.'" His accuracy did not extend to spelling, evidently. One boy said: "If it had not been for my taking sloyd work, I should never have thought of going into an architect's office to learn the business."

Almost all seemed to believe that skill in the use of tools, and the ability to make things needed at home, is the chief good to be derived from the study.

Their answers to the question as to what they have done with the models they have taken home show that they place a high value on their work. They have shellacked them, sent them to Germany, to Japan, to South America, back east to grandma, to uncles, aunts, and cousins all over the known world. They have salted them down in their trunks, put them in their big sisters' bedrooms, given them away as Christmas or birthday presents, and hung them up in the parlor for company to see. They have done everything on earth with their models except to lose them.

DEPARTMENT OF ART EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 12, 1899

The session was opened at 2 : 30 P. M. in the Jewish Synagogue, with the president, William A. Mason, Philadelphia, Pa., in the chair.

After the president's address, a paper, "Decorative Composition: Its Educationa. Value," was read by Henry Talbot, special teacher of manual training, New York city, which was discussed by Miss Mertice MacCrea Buck, Dearborn-Morgan School, Orange, N. J.

Miss Katherine M. Ball, supervisor of drawing, San Francisco, Cal., read a paper, "Problems in Artistic Rendering." Discussion by Walter A. Tenney, supervisor of drawing, Fresno, Gal., and Miss Eda Parrish, supervisor of drawing, San Bernardino, Call

The following committees were appointed :

COMMITTEE ON RESOLUTIONS

D. R. Augsburg, Oakland, Cal. Miss Frances E. Ransom, New York city.
Walter A. Tenney, Fresno, Cal.

COMMITTEE ON NOMINATIONS

Langdon S. Thompson, Jersey City, N. J. Miss Josephine A. Greene, Plattsburg, N. Y.
Miss Katherine M. Ball, San Francisco, Cal. Miss Emma Banister.
Henry Talbot, New York city.

The meeting was then adjourned until 2 : 30 P. M., Thursday.

SECOND SESSION.—THURSDAY, JULY 13

The meeting was called to order at 2 : 30 P. M. by the president.

The first speaker, Dr. Herman T. Lukens, State Normal School, California, Pa., read a paper on "Drawing in the Early Years," which was discussed by Miss Ada M. Laughlin, State Normal School, Los Angeles, Cal., and Miss Esther M. Wilson, State Normal School, Chico, Cal.

Then followed papers, "Art Instruction in High and Normal School," by Miss Josephine A. Greene, State Normal School, Plattsburg, N. Y., and "Art Instruction in the University," by Professor Henry T. Ardley, University of California, Berkeley, Cal. These papers were discussed by Miss Frances E. Ransom, Training School for Teachers, New York city; and Miss Gratia L. Rice, state director of drawing, New York.

Dr. Langdon S. Thompson, supervisor of drawing, Jersey City, N. J., presented the preliminary report of the Committee on a Course of Study in Elementary Art Education. It was read and adopted.

The report of the Committee on Resolutions was then read and adopted :

The Committee on Resolutions begs leave to offer the following :

It is the sense of your Committee on Resolutions that we convey to the rabbi and the board of trustees of this beautiful synagogue our thanks for their courtesy and generosity in giving to us so appropriate a place of meeting.

To the Committee on Arrangements, Miss M. Louise Hutchinson, Mrs. C. P. Bradfield, Miss Ada M. Laughlin, and Miss Frances Sterrit, we extend our thanks for the complete arrangements that their forethought and industry have provided.

To the officers of this department for their uniform courtesy, and fair conduct of its program and meetings, we extend a hearty "thank you."

To the officers and people of this city and this state, for the royal greeting, the generous hospitality, and the many evidences of their kindness, and thoughtful provision for our comfort and happiness, we say: "You have won our hearts, and our capitulation to you is unconditional."

D. R. Augsburg, *Chairman.*
Frances E. Ransom.
Walter A. Tenney.

The report of the Committee on Nominations was then called for. The report was as follows:

For *President*— Miss Frances E. Ransom, New York city.
For *Vice-President*— Professor Henry T. Ardley, Berkeley, Cal.
For *Secretary* — Miss Mary A. Woodmansee, Dayton, O.
Executive Committee— William A. Mason, Philadelphia, Pa.

The report having been duly adopted, and the nominees declared elected for the ensuing year, the department adjourned.

Mary A. Woodmansee,
Secretary.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

BY WILLIAM A. MASON, DIRECTOR OF DRAWING IN PUBLIC SCHOOLS, PHILADELPHIA, PA.

If it were not for the flexible nature of the subject of art education, the amount of experimentation which it has undergone would not have been tolerated.

In art education we have passed thru the stage of uniform development for purely utilitarian ends, to the stage of individual development for creative ability and self-expression. We began some twenty years ago in the purely industrial, or commercial, spirit, basing our work, along with the three R's of the old curriculum, on the belief that the child must be fitted for an occupation; and that in drawing his hand simply required to be trained in exercises developing only manual skill along the lines of so-called industrial art.

He was therefore given a purely automatic drill, chiefly in geometric or conventional forms, resulting in making his hand very skillful in imitating, but leaving the mind barren of real creative activities.

Later, however, under the impulse of modern psychology and child study, we saw the study of drawing widening out into art education. Then for the first time we began to see the full value of the subject in awakening the perceptive, creative, and expressive faculties of the child. But for a long period these vital functions of thought were circumscribed in

their activities, while the great original fountains of inspiration, from which all art impulses have always sprung, were almost wholly ignored.

Slow, indeed, has been our emancipation from the traditions of the past; and long, indeed, have we been in discovering the natural child and his simple needs. However, we were on the right track, for we were beginning to perceive that all expression — whether literary or graphic — to be genuinely educational must grow out of the child's own experience.

Moreover, we have discovered that, properly to stimulate and enrich his mind, we must approach the child on the side of feeling and enter his thought thru the channels of interest. Any scheme of education, more especially in drawing, that emphasizes the disciplinary side, to the sacrifice of the interest and the feelings of the child, will lead away from the true approach to his intelligence — the emotional or æsthetic door.

Consider for a moment the unnatural conditions that surround the city child. Where he requires activity we exact inactivity and unthinking compliance; where he needs initiative we compel imitation; and where he demands the things of nature we give him the things of man.

I believe it is our mission, as teachers of the æsthetics, to ameliorate these conditions, and to revert to simpler and more fundamental methods, at least in our own specialty.

It seems to me that the conflict is between the conventional and the natural, and that the solution of the problem lies in the proper reconciliation, all along the line of education, of these two factors. I will not presume, as a teacher of drawing, to trespass very far beyond the confines of my own subject; tho I feel that our work makes for general intelligence and culture quite as much as the other branches of study, and much more so than some. But I am convinced that there is demanded a more natural procedure in all subjects, a method more properly related to the nascent periods of the child, and one that recognizes the æsthetic element to be as important as the intellectual, at least in the early years, where, indeed, it is undoubtedly more important.

I believe that in the reverent, sympathetic study of nature and of the things of nature we have a promoter of all those activities that are so indissolubly bound together in the effort of knowledge getting — the perceptive, conceptive, and imaginative faculties, which externalize knowledge thru creative expression in words and actions.

No one can have failed to observe the magical charm which poems and stories of nature exert over the minds and hearts of children, to a degree possessed by no other kind of literature. "Hiawatha," "The Barefoot Boy," *Robinson Crusoe, Swiss Family Robinson* — these are the children's epics. The spirit of nature breathes thru these works. The green, sloping fields, the wooded uplands, the sparkling meadows with the sleeping ponds reflecting the blue vault above, and over all the joyous sky bearing its rich argosies of fleecy sails — all such picturse of outdoor

life electrify and animate the child. The free, natural, wholesome life which they portray imbue him with an exhilarating love for natural things and natural phenomena—the "knowledge never learned of schools."

> For, eschewing books and tasks,
> Nature answers all he asks.
> Hand in hand with her he walks,
> Face to face with her he talks.

This sympathetic study of nature excites the wonder of the child; wonder leads to admiration; admiration to a desire to know and understand; and these are the beginnings of knowledge.

If it is true—as I begin to believe it may be—that all the acquired knowledge necessary for a young child to learn in the first few years may be imparted with nature as a text-book and an inspiring teacher for a guide, it is doubly true of art education. Art has sprung from nature. Nature is its original and constant source of inspiration; and there can be no true art that is not based on her everlasting principles. Two-thirds of all pictorial art is simply nature herself—pictures of the landscape or of the sea, with no particular story except the "wondrous tale" of earth, sky, and water. Children are perennially interested in such pictures; and their interest is heightened if there is in the picture some object or objects that touch their own experience, whereby they may transport themselves thru the action of the picture into the fascinating life of nature, which is the natural life. Such is the inspiration of nature study. I believe it should be the groundwork of our studies in art education in the elementary schools.

It may be contended that natural forms are too complex and too difficult; and that the child should first learn the "alphabet of drawing" before essaying the drawing of concrete objects. But not all natural forms are complex. Nature affords an infinite variety of forms for all stages of progress; and the wise teacher will grade her exercises to suit the capacity of her pupils. We no longer teach grammatical construction before reading or composition is begun, but long after the child has learned to express himself fluently in his mother-tongue, both orally and by writing.

We do not even teach the analysis of the word—the letters—until after the child knows the word, or even the short sentence, as a concrete object of thought.

So, also, in drawing we have given up the analytical method, and are beginning to learn the desirability of the pupil drawing the concrete object at once, instead of halting and stumbling over the scientific construction of it. This latter study should be a later phase of the work, introduced after the child has secured fluency in co-ordination of subjective and objective ideation and motor action. Someone has wittily said that "nothing succeeds

like success." Surely, in drawing, nothing succeeds like drawing; not analyzing nor dallying with the theory of drawing, but graphically picturing things as they are perceived by the eye or conceived by the mind. Nor do children require, as some people believe, a period of manual drill preliminary to, and apart from, their first efforts at pictorial representation. Drawing and thinking must be related. Technique must be subordinated to thought-expression. Mechanical skill is gained at the cost of creative spontaneity. Linear execution from the very first is infinitely in advance of a child's conception of form and of its relations. Consequently emphasis should be placed on those exercises which will tend to develop and strengthen these important faculties.

Manual dexterity will be the by-product of genuine object-drawing; a means, not an end. Happily, the advocates of the "point, line, and plane" theory are rapidly becoming gray; and the dangers of this method are disappearing.

There is, however, a subject which in all of its bearings is as yet in the polemic stage. Man's application of nature in the manifold embellishment of his handiwork has compelled certain processes and procedures, more or less mechanical, and based on conventional usages.

Mechanical processes of reduplication, which cheapen and popularize objects and the decoration of objects, have imposed a certain style of art which we denominate conventional.

It is the obeisance that nature has to pay to this branch of art — a kind of mincing minuet of regular steps and formal attitudes, a method of behavior, as it were, very necessary in certain places and on occasions, but withal a final polish or veneer over the more substantial and sincere natural qualities. This conventional drawing, being a phase and an adaptation of natural forms, would seem to demand a sparing use in the early years, notwithstanding the simplicity of its elements, and to be introduced systematically only late in the course. This seems wise, both because this logically appears to be the proper order for it, and because its practice is prejudicial to the young pupil's correct observation of the individual characteristics and of the infinite variety of natural forms.

It is well recognized, however, that children's early drawings are largely imaginative, even when they draw from the objects before them. This is unfortunate in the interest of truthful representation. But, inasmuch as it seems to be the natural mode of graphic expression of the very young child, and corresponds with his naïve romancing in language, we should cultivate his spontaneity of expression rather than check it either by requiring him to draw conventional forms too early or yet by a rigid insistence upon perspective appearances.

The perspective difficulties of objective representation of solid objects should be introduced only gradually, by easy exercises, so that they may react upon, but not replace, subjective expression. Just here lies the

delicacy of the problem: to conserve creativeness and spontaneity of expression without checking the current of the imagination by either mechanicalness or the consciousness of error. Error creeps in just as soon as the child attempts to draw objects that have apparent, visual properties of form that are different from their actual or fact properties. Of course, we all know that the confusion of these perceptions in the mind of the beginner is due to the variety of associated knowledges which the eye unconsciously calls up. But we shall leave the psychological discussion of the causation of these errors to our co-laborer, the psychologist, while we labor with schemes for the gradual elimination of these errors. Correct perspective drawing is difficult for the beginner. All agree upon this. But experience has led me to discover that theoretical deliverances in regard to the age when children can best take up this kind of drawing favor the later age of the pupil directly as to the age and inversely as to the art experience of the teacher. That is, the less experience one has in teaching drawing to young beginners, the later he will defer perspective drawing. The converse of this is almost equally as true. Undoubtedly, it is better to postpone the perspective drawing of the type solids to about the third school year. What with modeling, paper-work, color, and the endless resources of nature-drawing — plants, sprays, leaves, groups of fruits and vegetables, and so on — there is good work enough to do, and this more abstract exercise may well be postponed.

One thing seems conclusive: children love best to draw things in their relations with other things. Their powers of analysis are immature. They see and draw things *en bloc*. The relationship of objects is not always correctly expressed; but the universality of this attitude of mind must guide us in the exercises which we provide for their advancement in the graphic arts.

There should be ample opportunity offered for free, spontaneous picturing of action stories, introducing features of the landscape, domestic objects, man, and the animals. This kind of drawing should be of the nature of busy-work, and should be given more for the cultivation of ideas and of versatility than for developing manual skill. We have adopted this freer method of drawing from the kindergarten, to which we are indebted for much of the improvement in our present methods of elementary instruction. Much adverse comment has been visited upon the kindergarten, and upon its methods in education, for the apparent superficiality of study which it seems to encourage, and for the wide range of subjects which it attempts to embrace.

Possibly too much is attempted, but probably not. The animating spirit of the kindergarten is the stimulus which it gives to the activities of the mind, along many avenues of thought, and the correlated motor activities which they excite. In drawing, this wider range of subjects

and the freedom of choice allowed the pupil in graphic representation stimulate his originality of thought, and lead up to true creative expression.

But we should not lose sight of the disciplinary side of drawing, while we are providing an outlet for the play of fancy. Actual object-drawing, in which the child is held closely to the true representation of visual appearances, should be a prominent exercise from the very first year in school. It is wiser to avoid the perspective element of foreshortening at first, and to select chiefly from that limitless variety of natural forms — grasses, plants, leaves, etc. — which are linear in general characteristics, and which give such excellent exercise in training the child's sense of proportion and relationship.

In this more exact kind of representation, or, indeed, in any kind of graphic representation, imitation of copies has very little value, as there is little or no connection between the motor centers and the visual centers. Seeing the form correctly drawn on the blackboard by the teacher is helpful in correcting errors of visualizing, but the major part of the child's drawing should be from the real objects before him. In no other way can true observation be cultivated. It must be recognized that ability to draw means primarily ability to see, and that mere skill of hand is only the means — more or less perfect according to the amount of practice — by which the mind expresses itself. The determining thought must be developed first-hand from the observation of actual objects.

As intimated before, I have discovered that in the drawing of natural objects children are generally more successful in drawing things in relation than in drawing isolated things. They will draw a simple spray better than a single leaf; that is, if the latter is at all complex; and they will draw groups of natural objects as well as, if not better than, the single objects themselves. And, after the first or the second year in school, when these groups may with profit be begun, they will make few errors in relative pictorial position. Second-year pupils will make extremely creditable drawings of sprays and plants, even the most complicated, as the daisy and buttercup; but who can get even passably good drawings of natural oak, ivy, or maple leaves short of the fourth school year? The delight which the pupils take in this kind of nature work is an inspiration; especially if they are permitted to draw with colored pencils or crayons, or to paint with water-colors. No other objects excel natural objects in point of interest to the child, and none possess such a variety of forms suitable for every stage of progress.

Subsequently a knowledge of the facts of the systematic science of botany may gradually be built upon the perceptional knowledge which the child had gained thru his own graphic study of the plant. Thus may art be made the hand-maid of science.

This procedure is not only scientific, in that original observation precedes the study of the classifications of science, so that the pupil is able to understand and properly assimilate these classifications; but the work is essentially artistic, and appeals at every stage to the æsthetic faculties, making a bond of associated thoughts in the mind, ready and abiding.

The visual forms of natural objects, being in a measure indistinguishable from their geometric aspects — if, indeed, they can be said to possess the latter — render them easier of representation than artificial objects, which have pictorial aspects widely different in form from the known shape of these objects. Everyone recognizes the very great disciplinary value which the pictorial drawing of the exact geometric solids has, and few teachers of drawing ignore them. But I believe their place in the course is not a principal one, but a very subordinate one; and, in point of time, late and not early. Their elements are simple, it is true; but for this very reason they are discouraging forms for beginners, as the slightest departure from the truth ruins the result. Moreover, their forms are too severe to be beautiful, unless one wishes to go into a rapture over the "ideal" beauty of a type form. I confess I am too materialistic ever to have been touched by it. On the other hand, one can hardly arrange two natural objects together without making an interesting and artistic group.

And, after all, it is one of our primary aims to seek out the beautiful in nature and in life. There is too much "humdrum" in the world, and not enough of beauty; and it is for us as teachers of art to introduce beauty into the class-room, that the pupils may be accustomed to it, and may themselves learn to select that which is beautiful in form and in color. Too much attention cannot be paid to the proper selection of beautiful objects for the groups, graceful plant forms, simple and chaste forms for the exercises in decorative design, and appropriate pictures for the schoolroom walls. These are agencies in the comprehensive study of art education.

Generally, then, the tendency in all directions in drawing is to revert to the simple study of nature and the things of nature. The book of nature is opened for the child that he may himself discover her secrets; that he may discover her truth in the infinite variety of her forms, her beauty in the regnant gracefulness of spray and bloom, and her good to man in the application of her forms to the objects of his construction. Surely, then, we have in nature study a sufficient basis for a course in drawing, from which may be evolved the simple art processes which it is necessary to introduce into our elementary schools.

PROBLEMS IN ARTISTIC RENDERING

BY KATHERINE M. BALL, DIRECTOR OF DRAWING, SAN FRANCISCO PUBLIC SCHOOLS

Artistic rendering that applies to such elementary drawing as is taught in our public schools can be reduced to rule and principle, so that by prescriptive methods it can be taught successfully to classes of children of all degrees of ability.

As all great achievements are the result of education — genius only representing training thru heredity — it naturally follows that a nation excels in the direction of its dominating thought and *Zeitgeist*. Therefore, where education has been largely scientific we can easily understand why such qualities as mechanical accuracy and positive definition take precedence over poetic suggestiveness in consideration of standards of excellence, and why so much of our public-school work has been so mechanical and uninteresting. But within the past few years the attention of educators has been directed along new lines of thought, and we find the art idea, with its perception of beauty, its recognition of the utility and fitness of things, now receiving equal attention with scientific training, and the children's work beginning to assume a more hopeful aspect.

Beautiful art forms, such as casts, porcelains, bits of pottery, lanterns, etc., that have taken the place of the unsightly, common, useful objects as models for drawings, have inspired a new feeling in the modes of expression, and we find a new technique supplanting the inartistic methods of working that formerly prevailed.

The present appreciators of children's drawings will apprehend the simple conception, the free expression, the loose handling, the poetic feeling, and the significant values of lines and color that may be found in these products, instead of passing judgment upon the qualifications that mechanical accuracy demands.

Accuracy is scientific, and as such it is valuable. It should be the aim of every student to attain to it ultimately, but not immediately. It tells the truth, but it tells all of it; it leaves nothing to the imagination; while the greatest charm of an art form is its suggestiveness, its power to carry thought beyond its own expression.

In all early work the most important factors are a desirable impulse, confidence, facility in execution, with just enough of accuracy to make effort conscientious and thoughtful. On the other hand, where accuracy is made the principal motive for training, pupils become full of fear; they lose all spontaneity, and their work is devoid of art qualities.

Rendering can never be wholly developed from the study of the object, because pictorial representation is an illusion, a sort of subjective

creation which aims to produce an effect on the eye similar to that produced by the object itself. The rendering is the art which has to be learned, and imitation must form an important part in this instruction. Not only the teacher, consciously or unconsciously, impresses his style on his pupils, but every art form that the student observes influences his expression in some degree. For this reason it is very important that the drawing-books used in our schools be supplied with artistic illustrations.

Imitation may, however, be used to the advantage or the detriment of the student. It may act as a suggestion, stimulating thought and developing observation, so that it results in an original creation; or it may be so used as to limit him to a fixed process of working that admits of no modification. Its principal value is in helping the student to do his work correctly, quickly, and easily, without being obliged to consume his time in useless experiments.

The influence of the study of pictures is more apt to be seen in the upper grades than elsewhere, for here the accumulated power acquired thru years of study first begins to be felt. Pupils then appreciate such qualities as conception of subjects, composition and handling of pigments; but the younger children are generally only interested in the function of the picture or the story told. If, however, we can show them drawings of masters that are similar in character to those they themselves are doing, they can easily comprehend excellences in structure, and are in turn influenced by them in their own productions.

Children's standards of excellence are generally regulated by what they have seen or what they have heard. The art atmosphere and environment show themselves very quickly in any form of expression, whether it be the furnishings of a room, the dress of a woman, or the rendering of a drawing; and where the thin and sharp or the ruled line, and the over-finished, highly wrought, and inartistic drawing prevail, it is a positive indication of the lack of training of the imaginative or poetic sense; for freedom of movement, softness of line, facility of execution, and simplicity in handling are the spontaneous expressions of artistic feeling inspired by the imagination.

Little children who have had no training will work with great freedom, using the direct and continuous stroke, and it is only when they are taught to place special emphasis on accuracy that they become over-careful, full of anxiety, and piece and patch their lines. As to simplicity of rendering, it is common for the young child to make a vertical line do duty for the representation of a man, and a horizontal line for a horse, and it is not until he has been systematically trained in the analysis of objects that he emphasizes details, making a leaf look like a network of veins and a potato like a collection of eyes.

Accentuation is rarely spontaneously expressed by children, but they

all, no matter what their age or grade, want to shade, and will do so if not forbidden.

Before we can arrive at any conclusions concerning the best methods of instruction by which results in rendering can be obtained, it may be well to consider what we mean by such terms as "free," "spontaneous," and "effective;" for words have such different meanings to different minds.

For this reason it is well to know that by free drawing we mean that which represents the self-activity, rather than the responsive activity, of the child; by spontaneous, that which flows from the pencil, pen, or brush as the expression of a controlling and absorbing thought; by simple, that which represents only such features as are sufficient to tell the story, or convey the idea; by effective, that which is forceful, definite, and vigorous, yet expressive of poetic feeling.

How are we to bring about such results? There is no royal road to any kind of learning, and while sometimes we are led to believe that by some sleight-of-hand we may acquire power, the experiment will soon prove that learning to draw is very serious business for both teacher and pupil, requiring much patient and conscientious work.

If we would train our children to do acceptable work, we must teach drawing as we teach other subjects: we must build thoughtfully, laying stone upon stone with the greatest care. It must be precept and example until habit is established and action becomes automatic, beginning early and continuing thru the entire school life.

Teachers of experience generally recommend and use prescriptive methods of working, because they know that until fundamental principles are understood and elementary features are mastered there can be no intelligent comprehension of the thing to be accomplished.

We can no more attain to freedom in drawing until the technicalities are mastered than we can get fluent expression in a foreign language until its structure and elements are learned.

We can only learn to draw by drawing; but in so doing we can acquire bad habits which subsequently will have to be unlearned, or we can proceed in a systematic fashion that makes for success.

There is a great deal of nonsense about developing ideas and letting children do as they please. Real spontaneous drawings are of very little consequence. It is only when the childish expressions of an idea, implanted by the teacher, are skillfully guided and guarded against objectionable qualities that they have any value or possess possibilities for growth toward real power.

Drawing is a language at best. The expression of an idea is its ultimate aim, but the definition of the conception is generally in proportion to the knowledge of technique; and it is also a fact that in proportion as one is able to express will he get thoughts to express.

The study of technique involves both eye- and hand-training. The

former must be attained by studying examples of good rendering, whether in outline, light and shade, or color; and the latter by good hard practice of the elements of which drawings are made. The two kinds of work should be carried along in parallel lines, and made to act and react upon each other; for in the study of good drawings we seek to find how the element of beauty is represented, and in our own products we aim to apply the knowledge acquired.

To analyze a work of art is a literary proceeding. It is an effort to reduce feeling to reason, and where there is no art feeling this is very necessary, for it is often the case that a literary or intellectual conception is the means of awakening an art appreciation.

When studying a picture we consider its truthfulness, whether or not the drawing is sufficiently scientific to convey the idea; its simplicity, by which only essentials are treated, so that the eye and mind may grasp the thought at once and make us feel that in some way the idea is not new, but originated with ourselves; its suggestiveness, whereby it represents mainly the type, rather than a special thing, which thru the association of ideas sets the memory and the imagination to work recalling objects of a similar kind or modifying them into new creations; its composition, by which we are able to detect an organic structure whose rhythmic lines express the principles of unity and balance; its projection, which represents solidity and makes it appear as standing out and being relieved from the space which it occupies; its values, by which its principal parts are given prominence and its subordinate features are made subservient; its atmosphere, by which the whole effect is softened as if veiled, as is the landscape on an Indian summer's day; all of which, united and combined, tend to produce that greatest of charms in art—poetic feeling.

With a correct idea of what constitutes good expression, we can give our attention to the practice of what we consider necessary for its accomplishment. Then, as all drawing begins with the stroke of pencil, pen, brush, or chalk, whether the work is to be in mass, outline, or light and shade, we have to consider methods of handling these tools and the quality of the stroke or line which they produce.

Much has been said for and against prescribed position and pencil-holding, but here again it is a question of use or misuse. For economy's sake it is wise to prescribe carefully every movement of the pupils in the first lessons, in order to show what is wanted, to secure the children's attention and confidence, and to enlist their interest; but the discriminating teacher will soon discern the easy and natural way of working assumed by some children, and devote her time to the correction of that which is forced, constrained, or unnatural; for the manner of working determines the quality of line.

Delicacy of touch and freedom of movement are impossibilities where hands and arms are rigid and pencils are held tight and close to the point.

Drill on lines must be given until children have some idea of what is expected of them, but not until they have become tired and lost interest. Then, whatever is emphasized in the drill work should be consistently applied in all subsequent exercises, for the soft sweeping lines must be constantly used. Every drawing lesson, whether it be the study of a geometric shape, a decorative pattern, or a pictorial representation, should be considered as much of a drill on movement and lines as any exercise in which the time is entirely given to unrelated lines.

The blackboard may be profitably used for all such work, and after pupils have learned to make light and heavy lines, graduated lines from light to dark and dark to light, their application will naturally follow. Whether a drawing should be strengthened in a line of uniform color or vary with accentuation is a matter of artistic feeling, and one that requires considerable practice and experiment before satisfactory results can be obtained.

Whether we should begin our work with the pencil, charcoal, or the brush, or whether it should be outline or mass drawing, or both, are questions which we are not prepared to answer, since it is very evident that these are matters that are in their experimental stage. But this thing is certain, that the art movement which is sweeping our country, which has done so much in different localities for schoolroom decoration, and which is responsible for the introduction of the penny pictures, as well as for the supply of inexpensive art works, is awakening a general art interest that will, in time, effect a most desirable change in the technique of our public-school work.

DISCUSSION

WALTER A. TENNEY, supervisor of drawing, Fresno, Cal.— If we look at this subject of rendering in the light of what is done by those who have attained success, we shall doubtless find an answer to the first question: "Can artistic rendering be reduced to principle and rule?" No two artists will treat any subject in the same way. One sees and feels certain truths, another is influenced by other truths, and each one renders according to the truths that impress him most. Again, no two artists will render the same truths concerning the same subject in precisely the same way. For instance, one artist wishes to express the appearance of sunlight, or of trees, or of flesh; he uses his medium in a certain way which seems good to him; another expresses the same things in an entirely different way. Take, for example, the picture of Francesca da Rimini by Count de Marini. The beautiful flesh tones in this painting were obtained by using only the three primary colors, unmixed, but stippled in a manner which produced a most wonderful effect. At a distance of a few feet one can hardly believe it to be a flat painting; it has all the appearance of texture and color, of roundness and solidity of life. Ary Scheffer treated his painting of the same subject in an altogether different manner, yet each has told the same truths in a pleasing and effective way. If time allowed us to

cite other examples, they would only lead us to one conclusion, viz., that artists do not work by rule. And I believe that from pupils in the public schools we can never hope to obtain artistic work by rule.

The terms are inconsistent and opposed to each other. A rule implies limitations. The only legitimate limits for art are the possibility of the mind to conceive and of the hand to execute. A rule implies uniformity. Uniformity and art are directly opposed, for art is individuality. I should say, then, that a few general principles may be given the pupil for his guidance, but that more than this would be unsafe.

On the other hand, if we say that artistic rendering is the result of genius only — as the term "genius" is so often understood — we are too near the other extreme. To say this would be to render impossible the ideal which has been raised in this country, viz., "an art education for the entire people." I believe that between these two extremes there is a middle ground, which is our best position, and that, while the great things, the high conceptions, in art are reserved for the few great souls who see with clearer vision, yet there is for the commonplace child in the commonplace environment a rich inheritance of the world beautiful.

Artistic rendering implies two things: first, a clear, definite mental image, a vivid conception of the thing to be portrayed; second, sufficient muscular control to enable the hand to execute what the mind wills. Any normal child may acquire the latter with a reasonable amount of practice. And any normal child may acquire the former, not by following rules, but by studying beautiful objects and works of art, till it becomes habitual to entertain beautiful ideas. To a great extent every object suggests its own rendering, and if the pupil be uninfluenced, he will render according to the truths which impress him. Take the child's drawing of a spray. It looks like a drawing of pressed leaves. No life, no beauty in it. How shall the fault be corrected? Shall we say: "Draw this line so or that tint so"? No; the trouble is he has not seen the object. I speak of seeing as a mental, not a physical, action. In other words, he has not felt that his plant was a living, sensitive, growing being, drawing its little life from the same source as his own. The teacher may *lead* him to feel something of this, and only then will his drawing show these qualities. Call it sentiment, or whatever name you will; it is the surest and — I was about to say — the only way. For if art is the outward expression of inward spirit, how can we look for artistic expression without the indwelling of the spirit of beauty? I find that whenever a pupil is unable to do artistic work it is not on account of inability to draw certain lines in a certain way, but because he has no mental conception of what is to be done; and that wherever there is a clear mental picture, wherever there is a definite, strong mental *im*pression, it will invariably find adequate *ex*pression.

Our first object, then, should be to induce in the pupil the desired mental state, and if we would respect his individuality, this is about all we can safely do.

I do not say that ability to render artistically can be successfully taught from the object alone; nor do I mean to imply that the teacher should not show the pupils how to handle the different media or how he would render different subjects by doing the work before them. This should by all means be done. There is no better means of inspiring confidence and respect, and even something more, in the pupils than by masterful execution on the part of the teacher. But there should be no slavish imitation of the teacher's technique.

In this connection should come the study of pictures. Should good drawings be copied? I do not say, "Never." But there is a better way. Let the pupil make his drawing, expressing his thought in his way, as best he can; then let him compare his work with drawings of similar subjects by good artists. I would not have him imitate the style of any of these, but study them for suggestions by which to increase his own powers of expression. The influence of good pictures thus used is very great. Our magazines furnish many examples of good work which can be used in this way, and they will be found

a source, not only of profit, but of much enjoyment. Next to the work of the teacher himself there is nothing that will do more to correct faulty technique, to help in overcoming the difficulties which the pupil encounters, and even in developing a good style of his own, than the careful study of good pictures.

"How shall we obtain free, spontaneous, simple, and effective drawings?" The general principles of the method of teaching which will secure these results have already been suggested, and if we are to do the best work, the details of their application must be determined by each one for himself; therefore it would profit little to discuss them at any length now. I will, however, state a few more points which seem to me important: First, we can never hope to obtain free, spontaneous drawings while we place before the pupil, to draw, objects which in themselves contain nothing of interest to the child, which never have attracted his attention, and never will again; not while we expect him to find more beauty in a painted wooden sphere than in a blushing, luscious peach. No! we must furnish him objects in which he is interested and which he would naturally choose to draw — objects connected with his play; objects which are really beautiful, and whose beauty appeals to the child; objects having color. Children love color, and an immense amount of it. Second, do not burden the child with too many rules — rules for sitting at the desk, rules for holding the pencil, etc. Do not begin with rules of perspective. I would teach the grammar of drawing, but I would not begin with it. The pupils in the fourth or fifth grade should be led to discover the phenomena of foreshortening and convergence, and to formulate their own rules; but these things should be understood rather than memorized from rules. Third, hold class criticisms. Ordinarily (at least in the lower grades), when the pupil begins his drawing let him work undisturbed till he has finished. Then collect the drawings, place them where they can be seen, and let the class criticise. The pupils will often do this as well as, or better than, the teacher. If any further criticism is necessary, the teacher can then make it. Then, perhaps, at another lesson let the pupils compare their drawings with those of some artist of recognized ability.

Simplicity in a drawing is a much desired quality. It can only come thru ability to see and express the broad, simple masses to the exclusion of minute detail.

The question we should ask is not, "Has the pupil drawn his lines in any particular manner?" but, "Has he given a true representation of nature?" The method of doing this should be his own, not ours. A well-known artist remarked not long ago: "It matters not so much how the medium is used, if we have a good picture here." The pupil's method of work will be his own individual method, if without undue influence we have led him to open his eyes to see and his mind to think; and if we have not done this, we have done nothing worth while.

DRAWING IN THE EARLY YEARS

BY DR. HERMAN T. LUKENS, STATE NORMAL SCHOOL, CALIFORNIA, PA.

A. THE STEPS IN DEVELOPMENT

A study of Dr. William L. Bryan's investigation into the learning of telegraphy suggested to the writer the probability of a similar analysis of the psychological factors in learning art and music. It was found, for example, that the curve representing the growth of skill in the rate of sending messages differed widely from that representing the developing capacity to receive messages. The shape of the two curves was quite

unlike. Again, both in this study of telegraphy and in a subsequent one in reading it was found that the curve representing progress in execution showed an alternation of sudden rises with periods of little or no increase in skill. Further investigation revealed the extremely interesting fact that each of these rapid increases in ability corresponded with the mastering of some particular factor in the work. When some new combination of ideas had been learned, or some new co-ordination of muscles had been fixed in habit, thus relieving the strain of voluntary attention by being turned over to the control of the lower automatic brain centers, the voluntary attention and strength were thus set free to master additional elements in the process in hand. Thus the process of learning resembles in a literal way that of crawling up stairs. Occasionally, however, landings are reached, and then for a long period no upward progress is made. Some get discouraged here, say they cannot climb farther, and wander off in the lower stories; others conclude there is no stairway any higher, and that those who are in the upper stories reached there by the elevator of genius, without having to crawl on all fours.

There is an interest in drawing and an interest in drawings, an interest in the technique of painting and an interest in great pictures. On the one side we have interest in the productive activity, in the creative power of the hand as well as of the imagination; while on the other side we have appreciation of the product, not only thru the senses, but also thru the understanding and the feelings. In the school we teach children to draw, paint, design, and decorate, and also surround them with art products, and teach them to love and appreciate beauty in nature and in art. But do we consider the interrelation of these two sides of our nature? The key to the understanding of the child's development in drawing is to be found right here. Let us consider the chief stages of this development.

First period.—Until about the fourth or fifth year the child's interest is greatest in the objects themselves, or in finished drawings by others. For he can produce nothing himself but scribble. Gradually, however, the scribble is eliminated, the drawing reduced to its lowest terms, and then feature after feature added—first eyebrows, hair, ears; then buttons, flounces, feathers, shoes, parasol, etc. As soon, now, as the child begins to care more for the delight of drawing than for the picture afterward, he has reached the

Second period, during which time the imagination develops. The child now not merely sees the crude lines on the paper, but rather his mind's eye pictures the scene beyond, that is suggested by the lines drawn, but not represented by them. He is under the influence of what Lange calls "artistic illusion." This is the golden age of drawing development, and should be prolonged as much as possible. The child says: "See me make a tree. Here goes a branch, and here are other

branches" (meanwhile drawing lines to stand for the parts he names). "And here comes a bird flying to its nest in the tree" (as he speaks he makes the lines that show the bird and its flight). Story and picture blend in one. Fancy creates a world in which the little artist lives, moves, plays, and draws. The child delights to draw "out of his own head." Why? Because in his own head are the pictures "fancy paints on memory's wall." Why should he want to draw what is actually before his eyes? Why represent what is already present? The little child feels no inner need to draw from nature. The picture shall stand for the absent object, person, animal, or plaything. It shall represent the imaginary, the objects of dreamland and fancy, and, as such, meet an inner craving of every boy and girl.

It is a fundamental fault of the drawing course that it ignores this period of development and destroys the golden age by leading the pupil into temptation. The drawing teacher admonishes him: "Open your eyes and see the tree and the fruit thereof, as they really are. Draw the apple exactly as you see it." The pupil does so, and his eyes are opened, and he sees his nakedness, and is filled with shame. The divine gift of artistic illusion vanishes; he awakes to find that he cannot draw. Then follows the curse all his life long. In sorrow he must draw from the object all the days of his life. Painful copying, spiritless imitation is the start, and unto the same the pupil ever returns.

The sensory side of his nature is appealed to by all the objects of culture and of art with which we surround the pupil. He is in the midst of an environment much older and more highly developed than he is. Do what we can to counteract this condition, we can never provide an equally stimulating condition for the motor side of the child's nature. We can, however, give the motor reaction, the restless activity, of the little ones free play. This we are bound to do all the more if we stimulate their senses. The child on the farm is healthier than the city child, because he is surrounded by a less artificial and less highly developed environment; but secondly, also, because he suffers under less repression of his activities.

For healthy development the drawing pupil needs during this period nothing else so much as an opportunity and encouragement to draw. Some time ago I examined a pile of over two hundred and fifty drawings by a Buffalo boy, Tom J., between five and six years of age. These were all struck off within a little over a year, and included such scenes as the following:

Eskimo; fort; steam engine; man stealing an arrow; going to set fire to an Indian wigwam; pilgrim boy crying because his gun burst; the first fight between the Indians and pilgrims; tomahawks, hatchets, guns, and swords; animal shows, including elephants, giraffe, yak, bear, skunk, etc.; "going to heaven;" red Indian in full dress and feathers, with

tomahawk and scalping knife; George Washington and the Indians; several houses on fire, with firemen, engines, hook and ladders; street parade; railroad train, etc.; the list ending with a great variety of Brownie pictures.

This drawing activity gave Tom considerable skill in handling the pencil and expressing himself in lines. It served him for companionship, broadened his interests and sympathies, and perhaps, in part, took the place of doll play with other children. "The fights, burnings, shootings, Indians, collisions, and other terrible scenes probably performed the same office for him, in respect of later wild escapades, that vaccination serves in preventing small-pox. He passed through the mild form on paper harmlessly, and the infection will not take as severely if a second attack comes." (*Pedagogical Seminary*, Vol. IV, No. 1.)

Thus drawing should be a usual form of expression, just the same as language. The one is no more a special talent than the other. Both need continual practice. If our pupils had to draw as much as they have to talk, read, and write, they would all be expert draftsmen.

The great danger in allowing children to draw so much "out of their heads" is that they will fall into the use of fixed conventional forms. For such, perhaps, the best cure is drawing from nature, for they have already lost the power of artistic illusion when they descend into conventional forms.

The zest in drawing is gone because the pupil has been taught to grasp the picture objectively as a material thing to be compared with the real object, instead of looking thru it to see in imagination the picture beyond suggested by the drawing.

Third period.—Pestalozzi tells us that the pupil should not be critical; learning comes before judgment. The rousing of the critical faculty too early brings on the stagnation of the third period, for the zest in the crude children's drawings is destroyed without the pupil being able to draw well enough to care to practice any more. He concludes he has not talent, and henceforth never draws except when forced to. Most people remain so all life thru, unable to draw any better than, or scarcely as well as, children of ten years of age. The other day I asked the graduating class in one of the Pennsylvania normal schools to draw a few simple objects, as a tree, bird, and hills with a house in the foreground. Most could not or were ashamed to show their drawings. Is it any wonder that they make no progress? According to the study of children's drawings made by Earl Barnes in California, the desire to draw decreases more and more after the age of thirteen or fourteen. All the drawing teachers I have asked have agreed that the children make the least progress about the age of twelve. After that they learn to work more neatly, it is true, and acquire greater mastery of their hand and arm muscles, but no greater skill in depicting expression or characterizing the human form.

Their appreciation of art objects goes on increasing, and is trained by study of pictures, paintings, and statuary all life long; but that is only one side of art education. The misfit relation between production and appreciation continues to grow worse. The development is one-sided, and is arrested.

Fourth period.—In some more fortunate people, who during adolescence experience a rebirth of creative power, the artistic development is continued, and many such become artists by profession. For thru this renewal of their art power their delight in producing again becomes strong, and thus it often happens that artists feel the divine zest in creation as a far stronger incentive to work than any pleasure or profit to be derived from the finished product. In this way are repeated those propitious conditions of the first golden age of childhood, and the artist again finds his deepest satisfaction in the work itself, and, no longer aiming at copying, he catches visions of the picture beyond the canvas.

The transition periods from one condition to another (about the age of four, eight to ten, and then, later, about fourteen or fifteen years of age) are of the greatest pedagogical importance. Perhaps they represent the nascent periods for some dominant factors in artistic development. The discouraging plateau level after the age of ten or twelve is due, in large measure, to false methods of teaching drawing, and can be largely remedied by natural methods and abundant practice in drawing all sorts of objects in which the children are interested. There certainly should be no sharp dualism between the mental and manual development.

B. THE COURSE IN DRAWING

1. It is a remarkable fact, attested by all observation of children's drawings, that at first they never draw from the object even when it is before their eyes, but always "out of their heads." In forcing early drawing from the object we are really making it harder for the child to arrive at the necessary preliminary stage of simplicity in outlining. We can well understand that it is easier to draw in a few bold strokes a characteristic sketch "from memory" (for only striking features are remembered) than to do it with all the bewildering details of the real object to look at. The memory performs the work of selection involuntarily.

2. Drawing from memory differs from drawing from the object only in the longer or shorter interval between the sense-impression and its motor expression. If the sense-impression is stored up in the memory, to be used later in re-presenting the object on paper when that object is no longer present, it is called drawing from memory. If, on the contrary, the hand at once tries to reproduce what the eye sees, the memory carries the sense-impression a very short interval before expressing it in lines on paper, and we call it drawing from the object. The latter is slavish, and is enfeebling if exclusively pursued. One glorious attraction

of landscape painting and sketching living creatures is that they are constantly changing, thus forcing drawing from nature to be more or less memory drawing. No one has mastered a form until he can draw it in any position from memory. Drawing from the object is a drill exercise in learning to draw that object, but it is not the aim of drawing.

If the early drawing "out of the head" degenerates into the stereotyped, conventional form for human figures, trees, houses, etc., it may be best to correct this by going at once to drawing from the object; but this will arrest further progress unless combined with much memory drawing.

3. Grace, balance, and facility in drawing can be acquired only thru muscle-training in those co-ordinations necessary for making such movements. Such exercises for muscle-training have been called, appropriately, manual-training drawing. While any muscles are untrained, the will has incomplete control of them, and only awkward lines can result. This manual training should begin with the movements of the large muscles, and can then properly be given to the children in the lowest primary grades. Pestalozzi laid great stress on this point, urging the priority of drawing to writing. Drawing requires and develops a universal flexibility of the hand, which, however, is ruined by the stiffening of it in particular directions by the uniformly up-and-down movements of writing. Drawing favors the fundamental, free, whole-arm movements, necessary in making long, continuous lines with large and variable sweep; writing leads almost necessarily to little, cramped, accessory finger movements of narrow range and uniform in direction and height. To convince oneself of this, one has only to attempt to draw free-hand any symmetrical design based on the loop. The awkwardness of the unbalanced figure that results is due to the one-sided training of the pen-wagging muscles.

4. Ruskin's words in the opening pages of *The Laws of Fiesole* should sink deep into the heart of every teacher: "The guiding principle of all right, practical labor, and the source of all healthful life energy, is that your art is to be the place of something that you *love*." "It matters not," says Comenius, "whether the objects be correctly drawn or otherwise, provided that they afford delight to the mind." Consider now that, when left to themselves, three-fourths of all children's drawings are human figures, with human interests linked with them, and we are forced to conclude that the object *par excellence* for drawing in the lower grades and the kindergarten is the human figure, and after that animal forms.

5. The only way to learn to draw is *to draw*. We provide far too little practice in drawing. All the required work in an ordinary "course in drawing" for a year could be gone thru with in an afternoon. No such subjects as drawing, reading, writing, etc., are properly taught in school unless the school work leads to a great deal of voluntary out-of-school practice. "I do not think it advisable," says Ruskin, "to engage a child in any but the most voluntary practice of art." Do our pupils fall in love

with drawing, and are they given free opportunity and encouragement to draw outside of the drawing period? There is no other way to learn to draw. It is not some knack that can be acquired by word of mouth, nor is it mainly eye-training in seeing, but, to a much greater extent, it is muscle-training in execution. Now, all muscle-training succeeds best when it is continuous, allowing only for the needful rest intervals. The practice effect gradually vanishes, and more is lost, of course, if the time for training is spread thinly over a long period than if well concentrated. The poorest writer I ever knew in one year became one of the best writers and took the prize in school in penmanship by practicing two or three hours a day during that one year. Writing is only a special sort of drawing. Success depends upon having the practice in a concentrated form. The most appropriate time for the drill work in object-drawing is, I believe, the last two years of the grammar course. Before that time the work should be more varied, less technical, more manual training for a co-ordination, and with a predominance of illustrative memory work. The latter stores the memory with visual images and trains to close observation. It bears a part in learning to draw similar to the committing of selections by heart in learning language, or to the school exercise known as the "giving of the substance" of a part previously read. Such exercises are, of course, based on the closest observation of the object, and presuppose some object-drawing as practice work, but the latter should never be held up as the end and aim, but only as means of training for memory drawing.

6. The work in "concrete geometry" that is usually put into the drawing course is a burden that does not belong there. Its proper place is in arithmetic, because the lines are not for depicting appearances, but for making and representing measurements. The distinction between free-hand drawing and mechanical drawing to a scale should be clearly marked; the latter is dominated by the idea of exact measurement, which, therefore, relates it more nearly with mathematics.

7. The course in drawing, finally, should be a series of graded steps in method of drawing, not a series of progressive lessons on graded objects beginning with the type forms. I do not know of any object inappropriate for a child of five or six to attempt to draw, if he feels any inner need to draw it. We saw, a few minutes ago, how wide a range of objects our five-year-old Tom exploited his skill on. That, it seems to me, is the healthy condition, and should be kept up thru all the subsequent years. The work in drawing is suffering from an over-systematization that limits the child and represses his efforts instead of providing opportunity for abundant free expression in all years.

These graded steps in method of drawing would yet have to be worked out on the basis of the study of children's drawings in different years. What we seem to see clearly already is that the early work should consist

of an abundance of crude childish sketches drawn out of their heads. These gradually lose their unmeaning scribble, and gain in strength by clear, strong, characteristic outlines. Then follows a course in which new feature after feature is added, and the general effect is in danger of being lost sight of. This growth in details continues uninterruptedly. At the time when muscle co-ordinations are becoming habitual, from about twelve to fourteen, the drill in object-drawing would seem to be most in place, and certainly it is then first duly appreciated by the pupils.

ART EDUCATION IN HIGH SCHOOLS AND NORMAL SCHOOLS

BY MISS J. A. GREENE, STATE NORMAL SCHOOL, PLATTSBURG, N. Y.

In treating the subject of art education in institutions so widely different in their aims as the high schools and normal schools of the country, it is necessary to view two entirely distinct fields of work; the one dealing with the acquirement of technical knowledge along various lines of artistic work; the other with the additional acquirement of the power to fit such technical knowledge to the needs of children of varying age and ability. In an ideal state of education the high schools and the normal schools would occupy these two entirely distinct fields, the work of the high schools being purely technical, that of the normal schools being entirely professional. But at present, because of the varying abilities and previous training of those entering normal schools, these schools must supplement their professional training with much work in subject-matter. Thus we find that normal schools provide, in addition to a study of methods of teaching, technical work closely corresponding to that of the high schools.

So the art instruction along technical lines given in high schools and normal schools may be considered as one field of work, both as to scope and character, the additional normal-school work in methods being a work entirely distinct from this.

The course of study in drawing, manual training, or whatever definite name may be given to art instruction in these schools, usually covers the whole field of the arts, being divided into the three departments: (1) mechanical and constructive work, (2) pictorial or illustrative work, and (3) decorative work. This work in the schools varies with the character of the pupils, the equipment of the school, and the individuality of the teacher; but the general courses of study must be somewhat the same.

Mechanical work in these schools usually includes a study of ortho graphic projection, working drawings of somewhat elaborate objects, and simple machine drawings. This work is supplemented and completed by

constructive work in paper, clay, or wood. Schools having an equipment for manual training can carry out this constructive work most practically in shop work.

The second department of work, drawing from models and objects, includes the usual still-life studies of objects. In a few schools, drawing from the living model, composition, and sketching out of doors are practiced; but these schools are few compared with the whole number of high and normal schools.

The third department, decorative work, includes a study of the principles of design, the making of original designs, and a study of historic ornament. In a comparatively few cases this study of design is accompanied by an intelligent study of color and color combinations with pigments. In a few schools, also, the study of historic ornament develops into a study of the history of art.

The question arises: Are these lines of work laid out in present normal- and high-school courses in drawing best adapted to the needs of pupils in these schools, both for their own mental and physical development and for their future practical use? Everyone is surely agreed that that plan of education is best which develops the mental and physical powers of the student, while at the same time giving practical and useful knowledge; and we are becoming more and more convinced that it is possible fully to develop the faculties of a child by presenting only such material as will be of practical benefit or pleasure to him in his future daily life.

In order to determine that material along artistic lines which will be of practical benefit and use to high- and normal-school students, it is necessary to know something of the future life of such students. The purpose of normal students is avowed by the fact that they are registered as members of a normal school. It is not so easy to determine the future of high-school students. It is a notable fact, and one with which we are all familiar, that only a very small proportion of the pupils in our public schools enter the high-school grades. Most of those who drop out of school before reaching these highest grades are compelled, by the necessity of earning a livelihood, to enter some of the many industrial occupations at the earliest possible age, and make up the great body of laborers upon whom our industrial system depends.

Most of the boys who are graduated from the high schools enter a business career on the completion of their work there, while a small percentage go to college and from there enter professional life. The majority of the girls marry and enter upon what should be the profession of home-makers and mothers. Most of those who do not marry become teachers, receiving their advanced training in normal schools or colleges, while a small proportion enter other professions open to women. Thus our mercantile and professional classes are recruited from the ranks of high-school students.

Let us examine the three lines of artistic work above indicated, and try to determine what work, if any, is not practical, and what, if any, may be developed to be a more important feature than it is at present.

What is the value of mechanical and constructive work in these advanced grades? First, is it of value in developing the mental and physical faculties of the student? Second, is it of practical value to him after leaving school? This work is certainly of value in developing an appreciation of the true form, volume, and relation of parts of objects, but this appreciation should have been gained in the early years of school work, and should have formed the basis of work in numbers and elementary mathematics. Constructive work, the making of things, with attendant processes of drawing, etc., is especially adapted to the capacity of children in the earlier years of school life. There is ample opportunity during the elementary and grammar grades to give all the mechanical and constructive work necessary to a general knowledge of this part of our subject, and to the development of the faculties trained by this kind of work.

It may be argued that advanced work in orthographic projections, sections, and the intersection of solids offers material too difficult for children to understand, but which is necessary for a perfect comprehension of the principles of constructive drawing. I have yet to find any work in ordinary constructive drawing which cannot be perfectly understood in the grades of the elementary schools with the making of working drawings from objects, the making of objects from simple working drawings, and a study of the simplest principles of projection which children in these grades can understand.

This work in advanced mechanical drawing does cultivate accuracy of thought and expression, and the reasoning powers of the student, but we have in the mathematical work of algebra, and plane and solid geometry, studies which have this end avowedly in view, and which should be sufficient to this end. Will the average student use the ability acquired in this mechanical work in his future daily life? From what has been said as to the future of high-school students, I should say that he would not.

In the country, those students who follow the various trades where this work would be of practical use leave school before reaching the high school. In the cities, such students, if possible, enter some technical school, where this work properly takes an important place in the curriculum. It seems, then, that much mechanical drawing and construction is out of place in high-school work.

This work should be taught simply, and take its proper place in the earlier years of school life, and the time now devoted to such work should be given to work which will be of practical value to these students in their after-life.

I have had the good fortune to be able to follow the natural

development of two unusually gifted artistic natures, and I have found, what other investigators have also found to be true, that the ideal and imaginative work of early years naturally develops into a careful and vigorous study of natural forms and their appearance, at the age of from ten to fourteen years.

The upper grades of the elementary school and the high school, then, are the places for the development of that technical ability and power of discrimination which will be of practical value to all high-school students in their after-life, in enabling them to discriminate between what is good and bad in artistic things. It is in this department of the work that the individuality of the teacher most thoroly asserts itself.

We find in the inartistic drawings of most schools a proof of the lamentable fact that most teachers of drawing are not themselves artists. It is an astonishing fact that most of those employing drawing teachers do not deem the first and most essential qualification of such a teacher to be the ability to draw. It is because of this fact that this department of art instruction has been by some considered a failure, and pupils fail to achieve the results which they attain in other subjects. Every student can learn to draw from models, to cultivate that power of observation which can only come by practice in this kind of work, provided that he is taught by those who can themselves draw easily and artistically. The only successful teacher of drawing is the one who can inspire, by her own work, an enthusiasm and love for such work on the part of her pupils.

Happily there is at present, among progressive and intelligent teachers, a strong effort to achieve in advanced work an artistic technique, and to do away with that hard and false method of drawing which has for years made public-school work in drawing the laughing stock of professional artists. This is right, but there is a danger that it may be carried too far if the cultivation of technique becomes the *only* aim of teachers.

We must not lose sight of the fact that the highest aim of this work is not to make artists of average students, but to give such a cultivation of the powers of observation as will make the life of each boy and girl fuller and richer for all time. They should be led to see the beauty and wonderful structure of bud and flower, of butterfly and bird, as well as the charm of great sky spaces, or stretches of sunlit wood and meadow. What a powerful adjunct, then, this work might become in the advanced study of natural science! And it should be used, and used freely, in correlation with such work.

Artistic rendering of objects should be taught thoroly and systematically. Composition and color should receive all the attention we are bestowing upon them, but we should not forget that we are to use the means of expression thus acquired in every possible way, and in all possible studies. The upper grades of the elementary school and of the high school seem the proper places for this work, the crude work in

connection with nature study in the lower grades being a proper preparation for it.

But it is the third department of the arts, decorative work, which is especially adapted to advanced, rather than elementary, grades, as it involves the exercise of those critical faculties only to be found in students of advanced age and with a fairly varied experience and knowledge. Children in the lower grades may become familiar with the beautiful ornamental forms of the past, they may learn to combine these forms in a pleasing manner with simple scrolls, and they may make other original arrangements of simple forms given them; but the necessary material of remembered images, and the concentration of thought required to make a truly original design, can only be expected from students of experience.

So, also, the history of art in its broadest sense is a study of great value in advanced grades, because it develops the critical faculties by making students acquainted with the best in art, and so giving them a standard by which to judge of things artistic. Many schools take up only the most limited part of this work, confining themselves to the study of historic ornament alone. There are, however, hopeful indications in the increased demand and supply of casts, pictures, and books, dealing with great works of architecture, sculpture, and painting. It must presage the growth of the proper idea of the value and scope of a study of the history of art. The greatest difficulty to overcome in connection with this study is the present lack of such material as casts, pictures, and books on art, not only in our high schools, but in our normal schools as well.

It is utterly impossible for students to develop along lines of artistic and manual work, or to grow into any appreciation of things artistic, without passing the formative period of their lives in an artistic environment. Almost without exception the pupils in our public schools come from homes whose furnishings are utterly bad from an artistic point of view. They do not know the difference between good and bad pictures, good and bad wall-papers, carpets, furnishings, etc., because they have never seen anything good.

It is in the province of the schools to supply this deficiency, and to develop good taste in students, not alone by a study of the dates of certain schools, the lives of great masters, or the memorizing and adapting of characteristic ornamental forms, but by surrounding them thruout their school life with casts and pictures of the greatest works of architecture, sculpture, and painting.

This artistic environment is as necessary to the development of good taste in art as a library is to the development of good taste in reading; and who shall say that the one is not as practical and beneficial in the full development of the student as the other? This development of taste should, however, not stop here.

It has been a generally accepted idea that if one could become familiar with and appreciate great works of art, a correct taste in the ordinary æsthetic questions of daily life would be formed. We all know what these problems are: the selection of proper wall-paper and carpets, under certain conditions of light, size of room, etc.; the buying of furniture and utensils for ordinary use; the choice of colors in dress; the painting, alas! of the outside of our houses; in short, the thousand and one practical questions which arise daily with everyone.

Could there be a more practical subject in the curriculum of our common schools than one which would lead to the formation of a correct taste in these matters of daily life? From what I have seen, however, of the surroundings of people apparently familiar with great works of art, I have been forced to conclude that a study of these is not alone sufficient to form this taste.

I have seen, in the homes of some people actively engaged in the business of art teaching, the Venus di Milo and the Sistine Madonna in company with wall-paper which simply "howled" and carpets which added to the general uproar.

It seems necessary, then, to supplement the study of design and historic art with exercises dealing with these simple, practical questions. Let pupils have problems in the selection of ordinary furnishings — colors for dress, combinations for the exterior of houses, etc. — and we shall be doing an eminently useful and practical work, and one which, if carried on intelligently and systematically in all our schools, would change the appearance of our homes and of our entire country.

It is to the normal schools that we must look for the culture of the regular grade teacher, who evidently must do much of this work. Here, again, occurs the question of the ability of teachers along this line. It is trite to say that art instruction in any school should be in the hands of specially trained and talented teachers. Far better would it be to have no attempt at art education than to have this training in the hands of ignorant persons. But, as it is true that most teachers cannot do artistic work in drawing, so it is also true that those who should educate the taste of the coming generation have themselves bad taste in artistic things. Even in the best schools, where the supervision of this work is in the hands of a competent teacher, most of the actual teaching is done by regular grade teachers. These are the teachers our normal schools must reach. At present most normal schools make no pretense of educating special teachers of drawing, but they do pretend to give to grade teachers such a knowledge of the various branches of art and manual work that they may intelligently carry out the work of a special supervisor. We should have in our normal schools, then, two things: an artistic environment which would be a sufficient means of developing good taste in our teachers, and time enough devoted to drawing and kindred

subjects to make a lasting impression upon them, and leave them with some ability to do the things they are expected to teach children to do.

But how few of our training schools have anything approaching an artistic equipment! We find libraries, laboratories, pianos, and musical equipment considered absolutely necessary, but beautiful surroundings almost entirely lacking. As to the time devoted to this subject, at present we are expected in one year to give to students, many of whom have had no previous training along this line, the ability not only to draw, but to draw well enough to teach others. Let the normal schools furnish the proper artistic environment and give to the subject of art study sufficient time for the development of some ability on the part of students, and the teaching of art and manual work in our public schools will begin to compare in efficiency and results with the teaching of other branches.

DISCUSSION

Miss Frances E. Ransom, Training School for Teachers, New York city. — It is the business of the normal schools to train teachers to know and to do, to develop the consciousness of power. It is not enough that they have the power, but in order that the greatest good may come, they must know that they have it.

Someone has said that the greatest individual joy is the knowledge of power. Who has not experienced the pleasure at some time of doing that which he felt he knew how to do?

It is the difference in this state of consciousness that makes the good or the poor teacher. If she feels that she knows some one subject better than another, then her greatest pleasure is in teaching that subject.

The greatest hindrance to the success of art instruction in our country today is that the teachers are more deficient in preparation for art instruction than for instruction in other subjects. "I can teach anything but drawing, for that is a subject I know nothing about. I cannot even draw a straight line," is what we commonly hear them say. They do know quite a good deal about the subject, and could, if they would, draw well.

It is the duty of the normal school to give the teacher this power of doing and of knowing. If the art department of the normal school can accomplish this, it will have fulfilled its greatest mission, for the country is rightfully looking to these schools for the ultimate solution of this problem.

There are hard conditions to be met. First, the students come to the school with all grades of preparation and non-preparation. Generally there is no common branch in which they show more weakness of preparation than in drawing. This is a natural outgrowth of the conditions which have determined the status of the subject in different communities. Some come without any previous instruction whatever, tho these cases are now rare. Most have received some instruction, but it is of such a disjointed and unsymmetrical character that the foundation work must be laid anew from the very beginning.

The subject has experienced so many upheavals because the school authorities in many places have taken it out of the course entirely, or in part, and then restored it again to its place, just as the spirit moved them. Again, the demands of the public have kept

up such a turmoil, by first demanding a course requiring mechanical accuracy, then one requiring results for industrial art, then one for pictorial work, discarding all mechanical accuracy, that she must have been a level-headed teacher who could keep her compass points steady and steer her craft away from the rocks and shoals of faddism, and hold fast to all that was good in the old courses of study, and yet have a course broad enough to meet the demands of modern life. The work is often made optional in the high schools. This has resulted in only those taking the course who were particularly interested or talented, and the many dropped it. These pupils come to the normal school.

The child in the grades who does not enjoy drawing is the exception; all are delighted to exercise their self-activity. But the average student comes to the drawing class in the normal school feeling that, because of her poor preparation, she is now to meet her Waterloo. She can accomplish the work in all other classes where purely mental effort is required, but this, which calls for the thought expressed in material form, makes her doubt her ability and long for a way of escape. This lack of confidence and the breadth of the subject make it one of the most difficult, if not *the* most difficult, subject in our normal schools from which good results may be obtained.

At the present time drawing is taught in all the progressive schools of our land, and all state and city examinations of teachers require this subject as much as arithmetic. What can be done to help her meet this question of drawing with as much confidence as she does the teaching or examination in the three R's? What kind of training, and how much, can the normal school give her?

The special drawing teacher has been trained in an art school and has special talent for her work, yet she feels that it is hard for her to keep up with the demands of the times. Can the grade teacher accomplish such work as the special teacher when she has in addition all the other subjects to teach? Certainly not; but the results of the past show that when teachers have been trained in a broad way to do some of the work themselves, and to understand its object, they enjoy teaching it and obtain good results.

The quickest way to dispel the mysteries surrounding the subject, and to overcome the lack of confidence in the minds of students, is to put them to work immediately at drawing, painting, and modeling, and prove to them, first, that they have some ability. The talented ones will work out their own salvation, with some suggestions. Every bit of genius should be treasured as so much wealth to the nation; but it is the poor and mediocre students who demand the best teaching ability that can be provided for them.

Constant encouragement and tact in criticism are needed here to a degree not necessary with children's classes, for children are always willing and anxious to make an attempt.

The work at first should be large and loose, and stand for the liberating of large ideas rather than for accuracy. As confidence and freedom are gained, more criticism and more exactness will lead to better drawing and close attention to details. Sketching rapidly and intelligently with chalk, charcoal, brush, and pencil should become so easy from practice that the student soon finds herself using it as a shorthand means of expression in other studies. By it she expresses with a few strokes what is meant by erosion of rock, eruption of volcanoes, the course of a river, or a thousand other everyday questions of geography or science, which language would in comparison convey but faintly. By this new method of expression the mental powers are strengthened, for every new way of expressing thought broadens the horizon of the mind.

Linear perspective, still-life drawing, and drawing from nature and from life can be simplified by paying direct attention to proportion and direction of lines, and remembering what Ruskin says, that "nothing distinguishes great men from inferior men more than their always, whether in life or in art, *knowing the way things are going*. Your dunce thinks they are standing still, and draws them all fixed; your wise man sees the

change or changing in them, and draws them so — the animal in its motion, the tree in its growth, the cloud in its course, the mountain in its wearing away. Try always, whenever you look at a form, to see the lines in it which have had power over its past fate, and will have power over its futurity."

It is not enough for her to recognize an Egyptian lotus, a Greek anthemion, or the Sistine Madonna. She must also know why they are standard — what elements enter into a good ornament, or a good picture, so that the enjoyment of all pictures, architecture, and ornament will open up a new world to her. If this work had no other value than its culture value, it would yield a rich return. But it must do more than that: it must have an actual result in the improvement of taste and observance of things in everyday life; in other words, it must develop that rare, valuable quality of common-sense.

We are completely surrounded by the products of design from the knob on the door to the triumphs of American architecture in our public buildings. Some designs are poor and ill-adapted to the purpose for which they were intended, and the student finds out as she works that in addition to this fitness to purpose the principles of unity, variety, and simplicity must be obeyed.

She finds that modeling will express ideas of form most completely, that water-color gives her a freedom and a knowledge of color that becomes a fascination. In a word, she *does* these things; the clouds lift; she is a new creature in the joy of discovering her latent powers.

Having the power to do these things, and ordinary teaching ability, she can get it out of others, for the principles of good teaching apply to one subject as well as another. She will develop her own methods when she knows the capabilities of children at different ages, and what phases of the work are best adapted to these ages.

She must know, too, what the value of water-color is as compared with clay; what mechanical drawing does for the child that free-hand drawing does not do. These and many other questions regarding the comparative value of different materials to express different phases of the work are necessary to the successful teacher. But imparting knowledge of this kind is secondary. The prime object in normal training is to have her feel her ability to draw. She will gain the other by experience.

The function of the normal school is not to teach any one system of drawing, but its course should include the best of all systems covering the principles of representation, decoration, and construction, so that when the student goes out to her school she can draw, and she knows the principles underlying the work. She can then adjust her teaching to surrounding conditions.

Going out with her portfolio full of drawings, and with the right discipline of head, hand, and heart, the young teacher will find herself well equipped to deal with the problem of drawing in elementary schools, and she will be a fitting example of the fulfillment of the mission of the training school in adding to the sum of human power and happiness.

ART INSTRUCTION IN THE UNIVERSITY

BY PROFESSOR HENRY T. ARDLEY, OF THE UNIVERSITY OF CALIFORNIA

In speaking upon the subject of art in the university I take the stand that courses in art and its history should be given in every university in the world, that no university curriculum is complete without such courses, and that no, so-called, "liberal" education can be satisfactory without some knowledge of art or its history.

It should be needless to say this, but unfortunately it is not only necessary to say it, but to emphasize the fact, even among some educators who seem to think that a "liberal" education consists in "cramming" the student with their own subjects, however narrow in range, vague in theory, or useless in practice.

Its great educational value is appreciated in some of our leading universities, but it has a hard struggle for fair recognition in our secondary or smaller ones, where its short-sighted and narrow-minded opponents jealously guard the fossilized traditions of inanimate education, and while praising art from the housetops in daylight undermine its value in the dark, as some of the antiquated subjects of the mediæval ages need protection from anything progressive. And where the study of art has been deprecated in any university it has been by those who either knew nothing of the subject or were jealous of its increasing popularity.

But education in our universities should be broad, far-reaching, and liberal, embracing the highest ideals of universal knowledge; and what subject can be more universal in its application than art?

Let us for a moment consider the usefulness of art in relation to other university subjects, and we find that to one of its most elementary features — that of drawing — science owes its greatest debt of gratitude; for how could the scientist describe his discoveries, or the student understand them, without the medium of drawings?

Huxley called drawing "the hand-maid of science," and Professor Tyndall has said that "one well-illustrated page conveys more knowledge to the mind of the student than ten pages of reading matter." But besides making us observant of what is within our reach, the graphic arts give us a clear conception of what lies beyond it; past history, distant countries, and great discoveries by the aid of art are made visible to us, and intricate details of construction, which could not be understood by verbal description, are made perfectly clear by illustration. If all the great works on engineering, botany, zoölogy, travel, biology, anatomy, etc., were stripped of their illustrations, what would they be worth to the university student?

Now, as to the history of art. When a student graduates from our universities he should certainly be familiar with the great works accomplished by man of the past ages, in shaping the crude raw material of the world to his highest ideals of use and beauty, from the Egyptian and classic arts to the Gothic and Renaissance; and he should be able to divide the past into the great art epochs of advancing civilization, as well as by the narrow political divisions of conquest. "To know history is not simply to be familiar with what men of the past have said, but to see what they have done," and the character of every nation and epoch may be read in the character of its arts.

As to the kind of art work best adapted to our universities, there may

be differences of opinion; but I hold that it should be of an industrial and historical character. All the great art epochs of the world's history were industrial and decorative — not pictorial. That is to say, their art was adapted to use as well as beauty — to purpose, place, and material, in stone, wood, metal, glass, clay, mosaics, fabrics, etc.— thus lifting whole nations to a higher plane of civilization and prosperity. Even Raphael and Michael Angelo made designs for the potters and the weavers, the silversmiths and carvers, and the work of these artist-artisans is so highly prized that they are exhibited today in our great museums and treasured in the palaces of kings. And the study of the industrial arts teaches our young people not to be ashamed of using their hands in producing something. Is it not too true that today many of our university graduates are educated away from all industrial art pursuits, rather than to them? And yet we are sending millions of dollars to Europe every year to buy almost everything we use in that line, even tho the raw material lies at our very doors awaiting development thru a higher education of the hand and mind than the mechanic or the pictorial artist can give; and our universities should be prepared to meet this important demand.

We already have enough "picture painters" for a new and undeveloped country, but we need, above all things, knowledge to develop our raw material to the highest standards of use and beauty, so that we may compete with the rest of the world in the industrial arts. It has often been said that all our best pictorial artists must stay in Europe to make a livelihood, while we have to send to Europe for artist-artisans to do our work in nearly every branch of art industry. We lead the world in some machine-made goods, but are woefully behind in art as applied to our industries, the most and best of which is done by foreigners.

Art courses in our universities should embrace both the technical and historical sides of art, so arranged that they may be taken together or separately to meet the demands of those who desire either a practical or theoretical knowledge of art. Those desiring only a theoretical knowledge could attend the lecture courses upon art and its history that every university should give, with only academic requirements as preparation; but the groundwork of all the technical courses in art should embrace good, strong outline drawing, correct details, and true perspective from the object.

Those teachers of pictorial art in our universities who are not university men always dwell too much upon the grouping of masses, pictorial effects, impressionism, and fads of technique, thus disconnecting the work of the art department from that of other university departments, as this is not the kind of work needed or expected of them by other departments. A student of industrial art, for instance, must think of careful outline and correct detail, instead of "impressionism." A student of

botany or biology must draw his microscopical discoveries in correct detail, instead of considering "pictorial effect." A student of engineering who has to sketch bridges, viaducts, or machinery does not have to consider the "grouping of masses." The pictorial artist of the "down-town" studio cries, "Too much detail," or, "Consider your masses;" but in university work we *must* have careful detail, and it cannot be too careful for scientific and industrial art purposes.

An art department in the university must consider its relation to and connection with other departments, instead of striving independently for pictorial "effect" and "show." It should form one link of a great chain composed of all the departments, and be prepared to offer the exact, careful detail work to students required by them in their scientific and other studies, as well as supplying the more advanced courses needed by its own special students in the industrial arts.

In order to accomplish this, our university students must thoroly understand the chief characteristics of the main art periods — Egyptian, Assyrian, Greek, Roman, Byzantine, Romanesque, Moresque, Gothic, and Renaissance — and learn to translate these into practical working designs, adapted to all purposes in every kind of material, with a full understanding of its limitations, so that the design may be reproduced in wood, stone, glass, iron, or any of the hundreds of different kinds of material it may be intended for; in other words, the application of art to industrial purposes, with a clear understanding of what others have done thru the various historic periods of art.

Of course, a knowledge of drawing and perspective, and ability to draw well in various mediums, is indispensable for such work, and should be of the practical kind before referred to; and when based upon historic ornament and the antique figure is more especially useful to the designer, as he is unconsciously absorbing the main features of various periods of art while gaining power in drawing, and the bold character of historic ornament gives greater strength and power than could be gained from other sources aside from the human figure, which should be studied in the semi-nude or very lightly draped.

The study of elementary art in our secondary schools in preparation for the university should embrace the careful study of light and shade and linear perspective in drawing from objects of strong, bold, and graceful outline; not in copying from "the flat," where light and shade and perspective are ready-made — such work is mechanical; but the student must produce these from the original model, and models that are bi-symmetrical are especially good subjects for representation, as every inaccuracy stands out with persistent prominence.

Too much of our school drawing is superficial, scattered, and misleading, and young children are led to believe that they can draw, paint, and design when they can do no one of these correctly. They are allowed

to play with paint before they can draw a place to put the paint, and to draw from imagination before they can draw from the object imagined. They are supposed to "design" before they can invent, and to adapt designs to art periods and materials of which they know nothing. One pupil from a high school told me that he could design stained-glass windows, but I found that he had no idea of the kind of glass or "jewels" kept in stock, how the window was "leaded up," or what "scale" should be used in the design; another said she could make designs for wall-paper and carpets. I was very much astonished, but upon investigation discovered that she did not even know the limitations of either the printing press or the loom, or how many colors she could use, or how they were blended in application.

Now, what is the use of deceiving pupils in this way and letting them waste time that should have been used in getting good solid drawing and perspective? What would we say of a musician who ignores the "five-finger exercises" and starts a beginner upon the execution of a very difficult composition?

These so-called "designs" are neither original nor practical, and the foreman of a factory would laugh at such crude efforts; but the parents think they are "real cute" and "wonderful." They certainly *are* wonderful!

If the pupils in our secondary schools become so conversant with drawing as to be able to render correctly and freely in "black and white" any familiar object in any position from any given position, they are doing well and are on the right road to more advanced work. The highest art is not possible until a pupil can master the simple art of representation of common objects, and such study is much more useful than a vague striving after less serious work for pictorial "effect" and "show."

We should try to cultivate a taste for the beautiful in our schools by cheerful and artistic surroundings, and by drawing from beautiful objects instead of ugly ones. Of course, we must use geometric models and objects related to them in order to teach perspective, but a Greek vase cultivates the taste more than a coffee-pot, or a Roman scroll than a potato. Of course, you might argue that a potato is beautiful, but there are degrees of beauty. Good technique was shown in paintings of morgues and butcher-shops in the French gallery of the world's fair in Chicago, but I turned with pleasant relief to the beauties of nature represented elsewhere and with still better technique. There is a great deal in the selection of art subjects, and the youthful mind should be trained to beautiful thoughts and impressions by careful selections for study.

One of the great hindrances to uniform and useful art work in our schools is the experimental "fads" of inexperience claiming to be related in some dim way to psychology and pedagogy; and another is the diversity of opinion caused by everyone posing as a critic and giving advice

upon "art in education" without any practical knowledge of the subject. It appears that anyone having the power to talk thinks he can talk upon art. Why not branch off into surgery or astronomy? It would be just as reasonable, for art requires just as much study and experience. But art critics are as numerous as flies in August, and sometimes know as much; but let us remember that "the value of a verdict depends upon the knowledge of the judge," and is a matter of experience and training, not experiment or "taste;" for taste without training generally means *bad* taste.

Our universities should encourage the study of art by offering degrees, as they do in almost everything else, from philosophy to engineering. This discrimination is very unjust, as we need able men in this subject more than in any other.

It is said that there are not more than half a dozen men in America, with a practical understanding of the industrial arts, who have at the same time academic training enough to be cultivated instructors of advanced students, and even these meet with opposition from those who are determined to keep everything useful or utilitarian out of education; but if we are to keep equal rank with the leading nations of the world, a love of art and a knowledge of its true principles, with skill to apply them to our industries, must be more universal, and our educated men and women must be taught, by precept and example, that it is no disgrace to have trained hands and eyes as well as trained minds; for the hand and eye, when united, are "the factors of everything useful and beautiful that we enjoy," and should certainly be educated together.

PRELIMINARY REPORT OF THE COMMITTEE OF TEN ON ELEMENTARY ART EDUCATION

MADE TO THE ART DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION, AT LOS ANGELES, CAL., JULY 13, 1899

PRESENTED BY THE CHAIRMAN OF THE COMMITTEE, LANGDON S. THOMPSON, JERSEY CITY, N. J.

The following resolution was passed by the Art Department of the National Educational Association, July 8, 1898, at Washington, D. C.:

Resolved, That a committee of ten shall be appointed by the president of the Art Department of the National Educational Association, and that the president shall be one member thereof, for two purposes:

1. To determine, in the light of psychology, environment, and experience, a proper basis or bases for a course of study in elementary art education, including form study, manual training, drawing, and the study of art works.

2. To outline, in a general way, such a course of study for the common schools.

Everyone who follows the vocation of a teacher of any subject for any considerable length of time consciously or unconsciously follows principles. Man as a rational being must think and reason concerning that which he does. Thinkers demand definitions, clear statements; and hence reasoning and thinking must result in the discovery of more or less truth, which, when stated in language, we call principles. The resolution above quoted assumes that there are principles to be observed in elementary art education which may be determined. It is the business of your committee to determine and state such principles.

AIM OR PURPOSE

Here, as in all courses of study, purpose or aim must be the organizing element. It determines principles, methods, and devices. Dr. Thomas Davidson says: "The end of all education, as of all life, is the evolution of the social individual in knowledge, sympathy, and will." It is thus seen that the aim is not a simple one, but complex. The whole being of the child is to be reached. The child is to be brought into right relation with three environments: (1) the so-called physical nature that surrounds him; (2) spiritual beings of his own order; and (3) the absolute power which determines all being.

Especially is the child to be trained to accurate and sympathetic use of his powers of observation, and given sufficient practice in graphic and plastic representation of these perceptions to fix them in memory. Also, the child is to be trained to discover and appreciate the beauty in nature and in art, with sufficient practice in reproducing or re-creating beauty to fix general principles in mind.

The aim, as stated above, precludes the idea of attempting to train artists in the public schools, or mechanical draftsmen, or professional designers in any field of decorative design. To set "the early impulse in the right direction" is all that can be expected, but to do this is worth infinite pains.

Besides the above statements as to the aim of elementary art education, your committee has only attempted at this time to find a basis for the analysis of the space arts into their four fundamental departments, as follows:

FUNDAMENTAL DEPARTMENTS OF THE SPACE ARTS

All space-art study and all drawing and painting (which is only drawing with color) must concern themselves about the form or the shape of an object. But these words "form" and "shape" have several meanings when applied to actually or potentially visible objects. There are two of these meanings, however, that must be clearly understood, defined, and distinguished, if we would avoid interminable confusion. The first meaning of "form" or "shape" referred to may be stated as follows: Every visible object, or potentially visible one, has, or may have:

1. An infinite number of apparent or accidental forms.

These apparent forms or appearances can be known or recognized only thru sight. They are visual percepts pure and simple, created by the self-activity of the observer.

2. Only one real tangible or potentially tangible form.

This tangible or individual shape of an object is the result of its extension in space, and is never seen thru the physical eye. It is for the *mind*, merely a mental concept.

These two meanings are entirely different, and the failure to discriminate these meanings and to keep them separate in the mind has caused the teachings of many writers to be a mere play upon words. These writers frequently use the same unqualified word "form" in both senses, perhaps in a single paragraph, or even in the same sentence.

Note the distinctions: The first is a *visual percept*; the second is a *tactual concept*. The first shape can *only* be seen; the second can *never* be seen. The first, by the observer's long experience, has taken on the quality of suggesting the second to the

mind; but the second, in everyday experience, never intimates any one of the innumerable aspects of the first. The first pertains only to line and surface; the second to line, surface, and solidity. The first gives us the beauties and the pictures of vision; the second gives us making, modeling, and manufacturing in real materials. The first can have but one or two dimensions; while the second may have one, two, or three dimensions. Hereafter we shall call the first apparent form or shape, or simply appearance, and the second real form or shape.

TWO PHASES OF APPEARANCES

Art recognizes two phases of appearances in objects, as the æsthetic results of vision, and the images or appearances themselves as such. The first phase may be stated thus:

A. The æsthetic appearance, or the beauty, of an object. Under A we may say that visual beauty (and we are talking of no other kind at present, such as aural beauty, or tactual beauty, etc.) is a matter of appearance; something only to be seen; something pertaining to visible outline and surface, but not to solidity as such.

Objects of beautiful appearance may be (1) natural or (2) artificial. If natural, they may be (*a*) mineral, (*b*) vegetable, or (*c*) animal. Their beauty may consist in their (*a*) color (analogy, contrast, harmony); (*b*) light and dark (outline, proportion, space division); and (*c*) composition (regularity, variety, unity).

In general these ideas may have their outward expression in the pleasing arrangements of natural objects in given spaces, and the division of surfaces into pleasing proportions for ornamental purposes. As the practical, concrete expression of the ideas thus gained, we have the historical ornament of all ages and countries of the world and modern decorative design. The scientific outcome of this study should give us the science of æsthetics, or the science of beauty.

How expressed.—Visual beauty is its own most complete expression. It exists for itself; that is, it does not depend on something else for its value or its expression.

The second phase of appearances may be stated thus:

B. The pictorial appearance, or the picture, of an object. Under B we must remember that the graphic representation of a visual percept of an object gives us a *picture*, an appearance; not the object as it is in space, only one of its innumerable visual aspects. Objects having possible appearances may be considered as (1) natural or (2) artificial. If natural, they may be (*a*) mineral, (*b*) vegetable, or (*c*) animal. The study and the record by drawing of our visual percepts of objects, if done to illustrate general school work, may be called illustrative drawing; if done for the purpose of learning the principles of drawing appearances, we call it model- and object-drawing, pictorial drawing, or free-hand perspective. The scientific study and representation of appearances yield us the science of perspective, both linear and aërial. There may be three stages of pictorial drawing: (*a*) outline, (*b*) light and dark, and (*c*) color.

How expressed.—The picture is the only complete and perfect expression, or outward realization, of a visual percept. (Oral or written language, modeling, making, or working drawings have no place here, and they can give no direct help.)

TWO PHASES OF REAL SHAPE OR FORM

We may recognize two phases of real shape or form, as we direct our attention to the real shape of an object as a whole, or as a solid, or to the real shape of its various planes, sections, and edges, and their relations to one another. The first phase may be stated as follows:

C. The real shape in space of an object having three dimensions. Under C we may say that these three-dimension objects may be (1) natural or (2) artificial. If natural, they may be (*a*) mineral, (*b*) vegetable, or (*c*) animal. If mineral, the study of their real shapes leads us to the science of crystallography. If vegetable or animal, their study as to real shapes will give us the science of promorphology.

The study and the analysis of the real shapes of objects may also reveal to us certain fundamental, ideal, or *type solids* which are useful as units of comparison in dealing with the concrete forms of all objects. The following is a convenient classification of artificial objects:

(1) Regular geometrical solids, or type solids; (2) objects of ordinary manufacture and building construction; and (3) objects of art. The study of the first group gives us the science of geometry; of the second, the principle of building construction; of the third, ceramics, architecture, sculpture, and all plastic art in general.

How expressed. — The only really complete and logical expression for the real tangible forms of these three-dimension objects is in solidity, in some material having three dimensions. (No vocal or written language can portray solidity directly. No pictorial, conventional, mechanical, or other kind of drawing can do it.) Remember that pictorial drawing and pictorial painting of any kind can only show us appearances, not real three-dimension forms.

The second phase of real shape or form may be stated as follows:

D. The real shape in space of the planes, sections, or edges of an object having one or two dimensions. Under D the objects to be considered are mostly artificial, and their planes may be classified as follows:

(1) Faces, horizontal or vertical; (2) sections, cross and longitudinal; and (3) their faces arranged in single planes, called developments. These planes with their edges may be studied as judgment concepts. When we study the edges, faces, sections, or surfaces of type solids and other regular objects, as buildings, furniture, machines, etc., and record our judgment concepts (in conventional drawing) of their real one- or two-dimension forms (not our visual percepts), we call the results: (*a*) plans or elevations; (*b*) sections; (*c*) developments or patterns.

How expressed. — It will thus be seen that the only adequate expression for our judgment concepts of edges, faces, sections, and developments is in mechanical drawing, or working drawing. Such drawings do not show us objects as they really are; they are only conventional representations of the separate and detached edges or faces, with their relations conventionally indicated. The synthesis of these separate concepts (they are not visual percepts) forms in the mind a whole, or a concept which may be realized only by a constructed object in space.

The basis for the conventional representations of these mental conceptions in the mind, or of the corresponding objects in space, is orthographic projections, a branch of descriptive geometry, with its practical departments of architectural, machine, and engineering drawing.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—Wednesday, July 12, 1899

The session was called to order at 2:30 P. M. by Mrs. Gertrude B. Parsons, of Los Angeles, Cal., who introduced the president, P. C. Hayden, of Quincy, Ill.

The president read a paper on "The Ultimate Object of Music Study in the Public Schools."

Herbert Griggs, of Denver, Colo., read a paper entitled "The Content and Extent of a Course in School Music."

The paper was discussed by Miss Alice Lyon, Whittier, Cal.; P. C. Hayden, Quincy, Ill., and Mrs. Gaston Boyd, Newton, Kan.

Mrs. Grace Miltimore Stivers sang "Parla," *Arditi*, very pleasingly.

Thomas Tapper, of Boston, Mass., read a paper entitled, "What Power does the Child Gain thru Music Study?"

The president announced changes in the program as first printed, and read the following communication:

Santa Barbara, Cal., July 11, 1899.

To the Music Section of the National Educational Association, in convention assembled, Los Angeles, Cal.:

Greeting!

Prevented by sickness from meeting with you, will be glad to entertain all musical pedagogs in Santa Barbara.

Juliet Powell Rice,
Chairman Music Section, State Teachers' Association.

An invitation to join the National Federation of Music Teachers was cordially extended by the president.

Under the direction of Mrs. Gertrude B. Parsons, supervisor of music, Los Angeles, Cal., a class of fifty-five pupils gave four class songs, and did some very creditable sight reading.

Upon conclusion of the exercise, Herbert Griggs, of Denver, Col., offered the following resolution, which was unanimously adopted:

Resolved, That the Music Department thank Mrs. Parsons and the children for the excellent class work exhibited; and, furthermore, that the grade teachers who, thru their wise supervision of their pupils and their hearty co-operation, have aided Mrs. Parsons in bringing the children to such a state of excellence, should receive due recognition and thanks.

The chair announced the appointment of the following Committee on Nominations:

Herbert Griggs, Denver, Col. Mrs. Gertrude B. Parsons, Los Angeles, Cal.
Mrs. Frances M. Clark, Ottumwa, Ia.

SECOND SESSION.—Thursday, July 13

The afternoon's program opened with "An Overture in Hungarian Style," by the Women's Orchestra, conducted by Harley Hamilton. In response to an enthusiastic encore they gave Rubinstein's "Melody in F."

Mrs. Constance B. Smith, of Jacksonville, Ill., read a paper on "The Necessary Education of the Supervisor."

The paper was discussed by Mrs. Gaston Boyd, of Newton, Kan.

Miss Abbie Gilman rendered effectively a contralto solo, "The Autumnal Gale," *Grieg*.

Miss Kathryn Stone, of Alameda, Cal., read a paper entitled, "What should Constitute a Course of Study for County Institutes?"

Mrs. Constance B. Smith, of Jacksonville, Ill., and Mrs. Frances M. Clark, of Ottumwa, Ill., discussed the paper.

A quartet of young ladies from the High School of Pasadena, Cal., sang two selections.

The president then suggested that the following committees should be appointed to assist the president in broadening the work of the Music Department of the National Educational Association:

1. Committee on Literature.
2. Committee on Federation.
3. Committee on Condition of Music in the States.
4. Committee on Model Course of Music Study.

A. D. Hunter, of Pomona, Cal., moved that the incoming president of the department be authorized to appoint committees on these topics at some time during the year. The motion was carried.

It was also moved and carried that the report of the secretary include a list of the members of the National Federation of Music Teachers for the current year, and of the special music teachers attending this meeting of the Department of Music Education.

The following resolution was presented by Mrs. Constance B. Smith, of Jacksonville, Ill.:

Resolved, That the Music Department of the National Educational Association extend its thanks to the Local Committee, composed of Mrs. Gertrude B. Parsons, Mrs. Laura V. Sweezy, and Miss Jennie Hagan, for its thoro arrangements; to Mrs. Juliet Powell Rice, of Santa Barbara, Cal., for her proffered hospitality; and to the artists and musicians who have contributed to the success and pleasure of the sessions.

The resolution was unanimously adopted.

An invitation to visit the Whittier State School was read.

W. B. Powell, superintendent of schools, Washington, D. C., gave an informal address on "The Value of Music in the Schoolroom."

Herbert Griggs, Denver, Colo.; Mrs. Gaston Boyd, Newton, Kan.; Geo. H. Taylor, Bakersfield, Cal.; Mrs. Constance B. Smith, Jacksonville, Ill.; P. C. Hayden, Quincy, Ill.; Mrs. Frances M. Clark, Ottumwa, Ia.; A. S. McPherron, Redlands, Cal., and G. M. Cole, Pasadena, Cal., discussed Superintendent Powell's address.

The nominating committee presented the following report:

For *President*—Herbert Griggs, Denver, Col.
For *Vice-President*—Mrs. Gertrude B. Parsons, Los Angeles, Cal.
For *Secretary*—Mrs. Constance B. Smith, Jacksonville, Ill.

The report was unanimously adopted, and the persons named were declared elected as officers for the ensuing year.

The meeting was then adjourned.

ELEANOR M. JOY,
Secretary.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

THE ULTIMATE OBJECT OF MUSIC STUDY IN THE SCHOOLS

BY P. C. HAYDEN, QUINCY, ILL.

The value of education to the individual must be found in its effect on the soul; in its influence as an element in character-forming. No consideration of ultimate values is adequate unless it weighs the well-being of the immortal part of man. As educators we assume that the formation of worthy character is the ultimate object of all education.

Some good men say that the public schools do not recognize this great truth, and are opposed to them on this account; but it is safe to say that most teachers work to build up good characters as well as to develop accurate scholarship.

It is hard to estimate how great is the value, in this character-building, of a true love for nature and God's handiwork in creation. That this love for nature is an important element in noble character has been recognized by the poets and seers of all ages.

"My heart leaps up when I behold
A rainbow in the sky;
So was it when my life began;
So is it now I am a man;
So be it when I shall grow old,
Or let me die!
The child is father to the man;
And I could wish my days to be
Bound each to each by natural piety."

This love for nature has stirred the hearts of all the world's great ones, and makes all feel the brotherhood of a common origin.

Three years ago, when in attendance at the National Educational Association at Buffalo, it was my pleasure to hear three representative educators make addresses before this Department of Music Education on the subject of "Music in the Public Schools." You will all recognize the names, and you all know the reputations borne by these men of national fame.

The official branch of the school system was represented by Dr. W. T. Harris, United States Commissioner of Education; the collegiate branch by Dr. G. Stanley Hall, president of Clark University, Worcester, Mass.;

the normal branch by Colonel F. W. Parker, of the Cook County Normal School, Chicago.

These three men appeared at different hours and sessions, and each did not hear the others speak. They were, however, a unit in their estimate of the place of music in school life. They each said that music was the most important study in the school course.

President Hall spoke first. I suspected that, to make his remarks pleasant to the audience of school music teachers to whom he was talking, he had made statements he would hardly care to maintain in a cold-blooded argument. When Colonel Parker followed, he took even stronger ground in stating the importance of music in education. I mentally put him in the suspected class with Dr. Hall.

To make the very last talk in our department came the venerable Dr. Harris, and when he took the same extreme view, I was forced to doubt my suspicion. I could not entertain the belief that these three men, representative in a national sense, would all say what they did not believe to be true.

Ever since that time I have been trying to get to a standpoint where I could say the same thing and give reasons for my belief, for I became convinced that these men spoke from a deeper insight into the human soul, and with a more just appreciation of the real values in life, than I could claim.

In Springfield, Ill., at the last meeting of the Illinois Teachers' Association, Superintendent E. A. Gastman, of Decatur, the nestor of the Illinois school superintendents, added the testimony of an active and experienced superintendent, and took the same position, stating, in an address before the music section of the association, that some time ago he had told his school board that music was the most important study in the Decatur schools.

This brief paper leaves me a very short time in which to attempt to tell why these representative schoolmen place so high a value on music in education, and I can say only a part of what I have in mind. I must ask you to let your imaginations carry out to completion the line of reasoning which I have time only to suggest.

I am coming more and more to the belief that these four men of learning, of training, and of practical experience were right, and I think I have in mind a suggestion of a demonstration of the correctness of their convictions, tho I know I shall fall far short of a demonstration in my remarks to you today.

I shall attempt to show that music holds a very important place in the development of the emotional, mental, and moral qualities of mankind. I would add, especially in the development of the higher, nobler attributes in childhood. It is with the child we deal in the schools, and my address today is written with the child in view, and the

arguments I advance are especially intended to show the influence of music on the nature of the young.

I believe that, to improve the life of the individual in any broad and general sense, we must teach a just estimate of life-values; of the superiority of the Creator over the created; that the man is more valuable than what he earns; that the pleasurable activity and enjoyments of the mental, emotional, and æsthetic faculties are more to be desired than the satiety of the appetites, or than the pleasure of personal adornment; and I believe that these things must be taught at the receptive period of life, in childhood and youth. Modern psychology informs us that the foundation for all future achievements is laid at this early period; that after thirty no entirely new thought germs are planted and brought to fruition. To gain maturity in middle age they must have been planted in childhood.

We certainly agree in believing that the proper training of a child brings into healthful activity his mental, his emotional, and his moral faculties. These faculties are not easy to reach thru number work or spelling. Music is the study that appeals most directly and most forcibly to this part of the child's nature. We do not wish to assume an extreme position in placing a very high value on music in the nurture and development of this divine part of man. Each attribute of human nature has its proper function and its proper place in education. We must, then, realize that the only adequate education is a training that reaches the heart and the soul as well as the intellect; a training that will fit one for the *enjoyment* of life as well as for its maintenance. In the long run this is the most practical education, too; for the happy, contented man or woman does more work successfully, and bears more burdens without breaking, than the poor soul who knows no pleasures but those of the body and of cold intellect.

Music is of the highest value in education, because it supplies in an attractive and effective manner the very elements that are so often wanting in modern life. The average American boy is born with the notion that the most important thing in the world is to make some money; that all his time should be given to preparing himself to work for wages; and that, if he does prepare himself to fill a position that will bring him a livelihood, he is doing all that should be expected of him. In other words, he places the skill of his eye or his hand above his own worth, and makes what he can do of more importance than what he is. No philosopher, no college president, no great preacher, no educated man would contend for an instant that it adds more to a man's worth in a community that he could shoe a horse well than that he was kind-hearted, patriotic, and well-educated. I take the position that music educates the child, not to make him bring a higher price in the labor market, but to make him a broader, better man in mind and heart.

It would now be proper to ask how music adds a valuable element to education which is not derived from arithmetic, geography, or spelling. I would answer: Because music is nature's way, is God's way, of appealing to the deeper nature, to the finer feelings. Thru music creation speaks to the individual and calls out a love for the race. The rhythm that controls the movement of music is the same that controls the movement of the spheres, and it touches the youthful heart because it is a part of God's great plan. The things that really move and mold humanity are, after all, the things that touch the common heart and lay hold of the great common feelings of mankind.

Nothing that is the common property of man does this so completely as music. The exact character of its influence and operation can be explained no more than you can exactly explain the influence of a noble picture, of a garden of beautiful flowers, of a park of lofty forest trees, or of a grand outlook whence may be seen the glories of a lovely sunset, or of a broad stretch of river and forest and landscape. We may say, however, that music appeals to an appreciation and love of the beautiful which exists in every young heart, and which should be assiduously cultivated by those who control child-training.

Far, far too soon the majority of children leave the training of school to take up the long struggle for sustenance, and happy indeed is the one who has in him the greatest capacity for loving and enjoying God's wonderful creation. All the lessons in all the books are not so important as to learn to live happily, drawing pleasure from the free gifts of the universe. Teach a child to love the sun and breeze of the day, the sunset and coming of the night bringing the moon and stars, all the beautiful gifts of God, and you make this world an abode of happiness and his life a benefaction to himself and his fellows.

It is this element of nature, this message from the heart of God, that music puts into the school course, puts into the church service, and puts into the home. You cannot tell what this element is nor describe its working, but we all feel it swaying our emotions, speaking for our heaven-given intuitions, appealing to the best that is in our beings.

When I think of music in this way, as the voice of nature speaking to the child heart and calling out the pure, innocent emotions of the being so lately part of God's own self; for, as Wordsworth says,

> Our birth is but a sleep and a forgetting,
> The soul that rises with us, our life's star,
> Hath elsewhere had its setting,
> And cometh from afar.
> Not in entire forgetfulness,
> And not in utter nakedness,
> But trailing clouds of glory do we come
> From God who is our home.
> Heaven lies about us in our infancy!

—I say, when I think of the vast importance of keeping in the closest possible relations with the invisible realities, and of sustaining the soul's purer and higher life, I can understand the extreme position taken by those four notable men in speaking of music and its value in education and in life.

In a brief glance at history we may see in one nation the effect on national character and achievement of an education founded on music. Just beside this nation we may see another that had no music in its system of education, and actively opposed the pursuit of music by its citizens.

These two nationalities struggled for supremacy in Greece thru centuries. Sparta excelled in producing fighting men, but dreaded with superstitious fear the supposed enervating influences of literature, poetry, art, and music. It even feared the influences of a mother's love, and the state took the future warrior from his mother's arms almost in babyhood and trained him in brutality even as Rome trained her gladiators.

An instance recorded by Plutarch shows the extent to which the Spartans carried the fear of any æsthetic influences. He writes that "Timotheus, a Milesian, was a celebrated poet and musician. He added a twelfth string to the harp, for which he was severely punished by the sage Spartans, who concluded that the luxury of sound would enervate the people."

Athens remains today the great fountain of art, poetry, sculpture, and music, and history tells us that music was part of all the study of poetry, literature, and such sciences as were then known. They sang and chanted all the lessons in these departments. The great Aristotle advocated and perfected this system. I need not describe the results of this education in this presence. You know the record.

Sparta! What is her record? Her brute force died with the stalwart bodies of her sons, and she left no record in literature, art, poetry, or music. Two paragraphs from the encyclopædia sum up the end of Spartan influence: "The site of the city has not been thoroly investigated, and it is a question whether much remains worth bringing to life." The second is: "She sank finally, we know not how, under the degrading dominion of a sort of robber chief (Nabis), who fastened his dominion upon her by the support of emancipated slaves and mercenaries of the lowest class. Her best citizens were put to death or banished, and she was debased into a refuge of pirates and robbers."

It is not the province of this paper to discuss how music should be taught in the schools to secure to the child the greatest good from its study. That is another question well worthy of discussion, for every earnest teacher will spare no pains to make his work of the highest possible value to the school and to each individual therein.

It is rather our purpose to maintain that the development of the

æsthetic nature and the formation of worthy character are the most important objects of education, and that music, more directly than any other study in the schools, assists in the accomplishment of this highest aim of a broad education.

CONTENT AND EXTENT OF MUSIC IN PUBLIC SCHOOLS

BY HERBERT GRIGGS, DIRECTOR OF MUSIC, PUBLIC SCHOOLS, DENVER, COLO.

Music as taught in some schools is entirely mental, entirely musical, or entirely exhibitional.

What should be the content or the extent of the study of music in our schools? Do we wish to turn out of our eighth year or of the high school well-equipped musicians? Do we wish to study music for exhibition purposes only? Do we have the music hour for the sake of recreation or pleasure for the pupil or teacher? Or do we wish a combination of all or part of the above?

Of course, the result to be obtained depends upon the point of view of those in authority. Personally I believe the object of public education is to make good citizens, and I believe that the study of music should be an important part of that education.

Should you ask me if I thought the acquisition of knowledge made good citizens, I should certainly say no; and as I believe the acquisition of knowledge is only a part of education, and it is that part which has nothing whatever to do with morals any more than theology has to do with religion, so I do not believe that a good musician is necessarily a good man.

The standard I have of music in the public schools is high, but no higher than it should be to be fair to the teacher, the pupil, and the public; but it is as high as, if not higher than, that of any other study. If pupils on leaving the eighth year or the high school have ability to sing intelligently music of ordinary difficulty at first sight—well enough to sing their part with good quality of tone in choir or chorus; if they have learned thru the practice of musical exercises to concentrate their thought, strengthen their mental power, quicken their perception; to appreciate the good and beautiful in music, so that they would rather associate with those who live better and purer lives than with the companions to be found on the streets; then I think that the object of music in the public schools is attained.

Music, when properly taught, should accomplish the following results:

1. Mentally, a quickening of the perceptive faculties thru exercise in rapid discovery, recognition, and concentration.

2. Physically, thru exercise in breathing, tone production, correct position of the body, and of the saturation of the body and mind with sonorous fluid.

3. Disciplinary, thru doing the same thing, in the same way, at the same time, and the effect of sustained tone and harmony on the mind, thus dissipating the spirit of contradiction.

4. Morally, by creating a love for the good and beautiful in music, thereby causing in pupils, especially of older years, a desire to associate with company of refined and elevated tastes; also to impress on the mind lessons of honesty, courage, cleanliness, truthfulness, patriotism, and respect for parents and elders by the repetition of good words set to good music.

If the above results are obtained, good citizenship will take care of itself.

To what extent should the study of music be carried? Shall it be carried so far as to cause the pupils to be hypercritical? Shall we carry it so far that they will become expert harmonists and adepts in musical history and musical form? Shall they be such super-finished musical dissectors that all the life and soul is wrenched out of what they perform or hear, and they receive no pleasure or enjoyment thereby? I think not.

It seems that with the multiplicity of systems (each one the best) we are moving in the wrong direction; we are teaching and talking thru our heads instead of our heads and hearts. There should be a limitation. We have been too critical and analytical, and have not been paying enough attention to the æsthetical and emotional.

The analytical and critical should be carried only so far as it promotes appreciation and sympathy. When the two lines begin to diverge it is time to stop. There is a certain mental work that must be done to enable the pupil to appreciate the beauty of anything. A child must learn to read words and sentences to appreciate a poem. A child must learn to read music readily to take in the beauty of a composition; but when the head goes before the heart, we have as a product a set of pedantic critics; and when the heart gets beyond the head, we have a lot of watery-minded sentimentalists. In the lower grades of the schools the technical and mental must be largely taught, but not to the entire exclusion of the emotional. In the eighth year and high school the two should be joined.

As I understand it, public education is not for the individual exclusively, but for the mass. I do not suppose that the public cares whether John Jones, or even a whole class of John Joneses, when they leave school have the ability to name technically every flower or plant, or their parts, or that they can transpose, harmonize, or sing at first sight any music set before them; but the public *does* care that they leave school with minds bright and active; that they take their places in business capable of earning a respectable livelihood; and, as members of society, courteous, honest, courageous, with respect for parents and elders; and, as citizens,

with love for their country, ready and willing to do their part toward the furtherance of their country's good. This is what I think taxpayers are paying their money for, and it is what they should expect and should have. This is public education; and, as I have said before, music is a part of it — and a most important part.

Unfortunately, the average citizen is very shortsighted; he does not know, but the school board and the superintendent *should* know, that the people of this country should have value received for the money they pay in the form of taxes — not here and there for an exceptionally proficient musician; not for a song, however beautiful, sung on exhibition day; but rather for boys and girls with well-rounded characters, all the better for the ability and desire to be useful to society, and to contribute their part to the pleasure and happiness of others.

But some would say that this would make the study of music dry and uninteresting, and that pupils would soon have a distaste for the study, and would drop it as soon as allowed. This brings me to another point, namely, the teacher.

We all know that the success or failure of a study depends on the manner in which it is presented. There are teachers who would make the Mississippi river dry if they had to do with it. There are dry and uninteresting facts to be learned about music; and this is not peculiar to this branch of study. There are many characters, many technical terms, used, and many difficulties to be overcome; and, if all this were for the sake of music alone, I would say: Teach only that which is pleasant, easy, and the most quickly learned. It depends on the teacher to make a difficulty pleasant; to make what is in itself dry, interesting; to create a desire to learn that which would be distasteful but for the manner in which it is presented.

Men and women learn in their youth what they never will learn in their later years, viz., the rudimentary principles of anything; and music is no exception to the rule. Neither men nor women will be content to apply themselves to that which they feel is more appropriate to minds of younger age.

If at the age of twenty-five one cannot read music readily at first sight, however much he may desire it, he will never learn. On the other hand, one who at the same age can sing easily at first sight music of ordinary difficulty will never leave it. How necessary, then, for the good and benefit of those who hear and those who sing in later years that it should be most thoroly taught, even if at the time it seems so dry and uninteresting; that the literature of music should be to them an open book of delightful and easy perusal!

What should be the character of the music of our schools for the various occasions which so often occur?

I am quite sure that all will agree in demanding music of a good,

wholesome character. Trivial music, from the lowest grade to the high school, should never be allowed. From out of the number of books published, and the large number of songs in them, a school is without excuse that has not music and words of a suitable character for all occasions. Music can be good and yet be cheerful and pleasant; it may be classical and yet not be tedious or too difficult. Suitable songs appropriate to the age of the children and to the occasion, well sung, are a delight to teachers, pupils, and listeners.

For morning exercises, especially in the high school, the music has much more effect than is generally supposed; if it is of a quiet, forceful dignity, or of a healthful, manly, or cheerful character, it surely leaves an impression on the minds of the pupils, whether they be conscious of it or not, that will effect their conduct; and the use of such music, with proper words, from day to day and month to month cannot fail to affect their characters for good. The pupil may not know why, but he feels better, a little more manly; perhaps a weak resolution is strengthened, or he sees for the first time the meanness of some contemplated action, and it is dropped. Of course, boy-like he would not, if he knew, acknowledge the reason, even to himself, but the effect is there just the same.

I have tried in this paper to impress upon your minds the necessity of a high standard of music, the importance of music as a study, the necessity of the use of the best methods of teaching, and some encouragement to those to whom the study has become tedious and irksome.

Is it possible that you have no pleasure in your work, and such work? You come before your class with all conditions favorable in so far as yourself is concerned, prompt and regular attendance of your pupils, disciplinary power, authoritative right, mutual confidence. You have an aim, it is high; you know what your object is, it is noble; with those pupils before you, is there no joy in creation? no pleasure in discovery? no satisfaction in development? It is for you in the study of music to create, discover, and develop in the mind of the child that which will make his life brighter and better, and from day to day, as he hears, reads, and thinks music, he comes to the lessons more and more prepared to receive new thoughts and experience new pleasure in the consciousness of gaining more power and control over faculties, the possession of which he had scarcely realized.

As he overcomes technical difficulties and learns to apply them in song and chorus, he feels a satisfaction in the acquirement of such knowledge, and then he learns to appreciate the beauties of music for its own sake. He desires to associate with those who love the good in music for his own sake, and he becomes a more manly and a purer-minded citizen for his country's sake.

DISCUSSION

Miss Alice Lyon, Whittier, Cal.—Is it not quite as necessary to develop the æsthetic and emotional nature in the early grades of school as in the later?

Herbert Griggs, Denver, Colo.—The emotional side of music should receive attention as well as the technical, but not to so great an extent, as there is not sufficient time in the fifteen minutes a day devoted to it.

P. C. Hayden, Quincy, Ill.—Practically, if the child has not learned the technics of music before the eighth year of school life, it will not be learned later. Ability to sing well and give expression to what is sung should be the main feature in the eighth grade and the high school. The mere singing of the song in the grades below develops the emotions.

Mrs. Gaston Boyd, Newton, Kan.—Every grade teacher recognizes that to teach dry, technical facts in any subject there must be an excitement of the imagination of the child in a pleasant direction. The teacher who can do this is the most successful in teaching any branch, not music alone.

WHAT POWER DOES THE CHILD GAIN THRU MUSIC STUDY?

BY THOMAS TAPPER, BOSTON, MASS.

I. I shall state my reply to this query at once, in order that I may use the time at my disposal to suggest how the power may be gained; for a catalog of virtues must at all times prove less interesting than the process by which the virtues are acquired. If I were to state it in a word, I should say that the child gains thru music study the power of entering more fully into the complete life. To amplify this simple statement and to specify the lines of activity along which the child must travel will show how valuable an investment his music activity is.

Primarily the child's gain is that he becomes attached by a strong tie to the complete life. Its inspirations and its possibilities are the more open to him. He has gained another interest in life. Thru one more powerful channel he may pass out into self-expression. Not only is he provided with a new form of mental activity, but he is permitted to enter another world of thought; a world of thought that is as distinctive as that of the representative arts; a world in which he shall be a delightful sojourner, finding on all sides the records of lofty men, of men whose thought is unsurpassed in any other realm of the intellectual or emotional. In brief, his inheritance is greater, his interpretation deeper.

What has education for its aim? However we reply to this query,

we cannot escape saying in one word or another that in education we strive to discover the possibilities of the individual. Really, in our tentative, bungling way we are trying to ascertain whether the child is born, as Professor Smith, of Peoria, has so aptly put it, long or short, to permit him to ascertain himself — who he is, what he may do, and how it shall be done.

Now, music provides the child with another knowledge — as Bacon would say — by which he can interpret life, more especially the creative life within. Again, in music the child finds a means of becoming more of himself. It is an outlet for his spiritual activity; a language permitting him to communicate closely with his fellow-men.

Even if he be born deficient in musical gifts, he will gain from its elementary steps the power to do, the experience of being active along a definite line. Like mathematics and literature it will exercise his mind, for it is the poetry of mathematics and the poetry of literature combined. It will occupy his thoughts, and it will confer pleasure upon himself and perhaps upon others. In moments when his thoughts are his only companions he will find that music thoughts are the fairest and most suggestive of any that hover about him. And, now and again, they will tell him, as if he were a lost child, many things which he seems only dimly to remember.

II. When we have recognized what music can do for the child, we are straightway interested to know how it can do it. By what process of training can we secure the greatest result with the least friction?

All educational activity, past and present, has contributed this testimony: Training that makes for any degree of mastership worthy of the name must begin in early years as a daily effort. Here is the key to the solution of the school music problem: Give it skilled guidance every day, and a favorable result at once issues. What I mean by a favorable result is this: The child shall study music from his entrance upon school life until his college graduation, and at the end of that time he must be able to take the score of the "Messiah," or of "St. Paul," or of the "Christmas Oratorio," and get at its meaning by himself. Let me point out to you that this is all he can do in the classics of Latin, Greek, French, German, and English. When he can work his way into the meanings of a language — whether the language be music or not — he is intelligent and self-reliant. Let us begin, therefore, with the child to make music in school a daily effort. Who is to make that daily effort? Not the supervisor. We may produce books, and charts, and devices without number; we may supervise the teacher once per month or once per week; but what she does every day, from her own knowledge and inspiration, is, in the long run, to decide whether the music investment is a good one; whether the child shall in manhood secure a dividend on his efforts; whether he shall conclude that the investment was made thru a fraudulent agent; or,

worst of all, whether he shall fail to recognize the fraudulent agent, and erroneously decide that music is a resourceless art.

You recognize the one to whom I refer. Public-school music is, and always must be, the reflection of the habitual attitude held toward it by the grade teacher; because her attitude creates the atmosphere of the daily effort.

Then, why not leave the whole subject to the grade teacher and be done with it? Tho music has had a place in our public instruction for half a century here and there, it is in reality a new subject for two reasons: the first is that many towns and cities have not yet introduced music; and the second is that only in recent years have we begun to teach it scientifically. Hence it is still a new subject. It is in behalf of new subjects that the specialist is employed. He has been described as one usually strong in his subject, but weak in pedagogics; while the grade teacher is ordinarily stronger in pedagogics than she is in specialties. However, the result of the presence of the specialist is that little by little the grade teacher becomes acquainted with the process and tries her hand. In time she becomes skillful.

"The true and worthy art specialist in schools hails with delight the increased ability of the grade teacher and hastens to turn this ability to good account. He encourages the efforts of the grade teacher to the utmost; and, with better art and greater skill, leads to the realization of the highest aim of which his effort is capable."

III. I have said that what the grade teacher does every day out of her knowledge of music and out of the inspiration which music is to her decides the ultimate benefit which the child is to realize from the study.

Manifestly no time should be lost in coming to a definite understanding with the grade teacher, making it clear what her knowledge must be and what the nature of her inspiration may be; for we are proceeding on the assumption that what the child gains as a power is apt to proceed from what the teacher does as a habit.

The grade teacher must possess two sets of qualifications. We find that the child accretes power thru self-activity. By personal effort he must sustain himself in the world of action, and he cannot sustain himself unless he desires action. Mastership, however slight, has never been won in any department of human activity unless desire inspired the labor that proceeds toward it. Hence the grade teacher's fundamental qualification is to know how to create desire and how to inspire the labor it demands.

If she has been an observant teacher, she will have discovered already that education yields results as a consequence of systematic guidance on the teacher's part, producing systematic labor on the part of the child. But the labor must be there. The child must be busy, day after day, banking unconscious power out of the proceeds of conscious application.

He may learn from memory all the choice bits of literature in existence, but until he gets down to *a*, *b*, *ab*, and stays there until he understands it, he is an illiterate child. I shall assume that the grade teacher holds this view so tenaciously that she never dreams of a child becoming musically intelligent by any other process than that of systematic hard work in the details of music.

The teacher's second qualification has to do with her perception of music. She must see in it an expression of human emotion; it must be to her a form of thought which manifests itself in tone only, because it cannot manifest itself thru any other medium. If she once gains this thought, she will not misunderstand a few essentials that usually confuse both the idealist and the ultra-practical person. I refer to her comprehension, in the abstract, of printed music and of a composer.

What is printed music? It is the servant of thought. It sounds simple enough, but in reality it is the most commonly and persistently misunderstood idea in all our profession. So much is it misunderstood that not a few of us persist in erecting the temples of our effort, not to the meaning of music, not to the thought of music, but to the representation of the meaning. Printed music is the servant of meaning. Of what meaning is it the servant? Think for a moment of Beethoven. He is universally accepted as a great thinker. Hence his works are expressions of great thought. He was a man denied by the creative energy the ability to express his thoughts in words, but he was given an abounding capacity for expressing his thoughts in tones. Observe that the reality and substantiality of the thought remain intact, and we learn to know it, to comprehend it, to love it. Now, understand that to Beethoven tone is the receptacle for all experience, for his supplication and his doubt, for his love and his hope. Everything of his intellectuality and of his spirituality is poured out into the world thru tone as a channel. All he craves, all he demands, all he says, all he learns, all he remembers, all he proclaims must be contained in music, or it is insufficient and he will turn from it. But we find that he enters it deeper and deeper. We turn to study his thought in all its phases. Can we afford to give ourselves up wholly and enthusiastically to the symbols of his expression, to the particular form of shorthand which he penned in a raging fever of excitement lest the glory of the thought pass from him ere he pictured it?

When the grade teacher takes up music she obligates herself to get in touch with this comprehension. It is not difficult; without it failure is assured; with it she is reliable. She recognizes meaning in symbols, and will never worship symbols for their own sake.

Thus far I have equipped the grade teacher with the primary qualifications: (1) an understanding of the child; (2) an understanding of effort; (3) necessity for desire toward effort; (4) an understanding of the meaning of music; (5) an understanding of the composer; (6) an

understanding of printed music. Thus equipped, she is, to begin with, a well-balanced success. She can now rely on her native common-sense to care for details.

IV. I now turn to the secondary qualifications — secondary, not because they may be dispensed with, but because they act only out of the influence of the primary qualifications. They are four in number: (1) tact; (2) the ability to follow simple directions exactly; (3) the tendency to continue to be a learner, constantly increasing her intellectual capital by effort; (4) a little knowledge of music.

I shall not speak of the first three, and only a word as to the last. The actual details of her "little knowledge of music" will result from her own effort and the instruction she receives from her supervisor. There is one task, however, she must not fail to perform; she must master in every detail the music material used in her grade. It must be as familiar to her as the common monosyllables of daily conversation. And she must have the opportunity to become somewhat familiar with the music instruction in the grade above and the grade below her own. This makes her a chain instead of a detached link.

V. Having stated at some length what a grade teacher ought to be, let us now give her an opportunity to make demands on her associates. Not infrequently they constitute her an unlimited liability company, responsible to everybody for everything. If she is to teach school music daily and secure results so excellent that her supervisor may continue her work into the realm of the artistic, she is perfectly justified in demanding:

1. Regular and systematic instruction from her supervisor in the music of her grade; that is, if she is a third-grade teacher, there must be a class for the study of third-grade music.

2. There must be provided some instruction in the music of all the grades, so that the teacher learns her third-grade work in its proper connection.

3. There must be provided a simple working scheme, so that the grade teacher can see that she is proceeding along a definite line. This will benefit her largely, because she will learn to regard the music lessons, not as detached units of effort, but as a line of effort making for a definite place.

4. As a part of all class work in music the supervisor should set aside some minutes for study of good music — say a simple chorus from an oratorio. If in a whole year but one chorus is partly learned, he will find it an abundant opportunity to tell his teachers about the four-part structure, the laws underlying the union of music and text, the general form structure and its æsthetic elements, the music expression as suggested by the words, the study of word and syllable accent, the relative value of parts; in fact, here is at hand a liberal musical education.

5. Lastly, problems that arise in practice should be discussed in the supervisor's class, because problems that spring from daily work are

education at first hand. In fact, efficient educators are those who are constantly on the alert to discover what there is in their methods that pupils cannot do. Thus it is that children, in what appears to be their incapacity, dictate to us feasible ways and means of education.

Now, our grade teacher will preside over the daily task in music and bring about abundant familiarity in the processes of music. The daily drill on the first steps must, by her tact, her knowledge, and her enthusiasm, be robbed of its mechanical aspects and clothed with interest. How is she to do this? I do not know. It should be a joy to her to realize that all that is true and lasting in her work is in its very nature so close to the force of her rarer self that even a theorist has no theory to offer in regard to it. Her methods are her own.

We see now clearly that the supervisor will secure as much artistic perfection in school music as the grade teacher contributes skilled instruction. The two invariably balance each other, for art is knowledge lovingly directed toward the beautiful.

VI. But will the grade teacher respond freely to all this? Will she accept the responsibility and meet all the requirements? It will depend somewhat on the supervisor.

But let us return to our query about the grade teacher. She will never accept music work except thru the law of human nature's interest in itself. She will rejoice in music work when she discovers how much it does for her personally. She will accept it when she finds that it develops her, increases her worth, lets her enter upon the complete life, and ties her to that life by a strong thread. She will love it because she will find that it reveals her to herself; because she sees herself in it; because she gazes into it as into a magic mirror and sees herself, not as she is, but as she may become. Day by day she will gain for it love and enthusiasm — the love will never be sentimental and the enthusiasm will never be noisy.

This experience will teach her better than anything else that it is a worthy power to possess; that it is a worthy power to confer upon a child, because it bestows upon him just what it bestows upon her: another opportunity for self-discovery; another opportunity for self-explanation; another opportunity for the outflow of his divinity; another opportunity for knowing the rarer thoughts which the world possesses; another opportunity for understanding the higher language which, as he gropes in world-experience, whispers now and again, reminding him of things that he seems but dimly to remember. And these, as we found in the beginning, are some of the joys of the complete life.

METHODS OF TEACHING MUSIC

BY W. B. POWELL, SUPERINTENDENT OF CITY SCHOOLS, WASHINGTON, D. C.

I am one of those who believe that music should constitute a part of every course of instruction in every grade; that it should be made a requirement like spelling or writing. Nothing in the course of instruction, besides civics, takes a child into a mutuality with nature as music does. It leads him to see the dependence of man upon his fellow-man in society; it teaches him to realize himself as a part of a composite whole, and leads him to understand and appreciate the value of others in society.

There should be no poor music allowed in the schoolroom, any more than poor English should be allowed. I would proscribe music that is not absolutely good. This means, then, that the director of music must understand what good music is. I believe that the chief work of the supervisor is to train the teacher to know when music is good or when it is not good.

The music, to be good and profitable, must relate to all branches of education; music should come to enrich everything that is said and done in the schoolroom.

Music for the sake of learning to read is of little value to the pupil. We worked and worked with the A B C's, and never learned to love and to read literature. When we began to teach from the standpoint of literature we began to read literature in the first grade; in the second grade, literature; in the third grade, literature; and our children were reading and writing literature; they spelled better than they ever spelled before, and they wrote as children never wrote before.

I would have the children sing about everything. I would have them sing in the first grade, sing in the second grade, and sing in the third grade; then, later, I would teach them the forms of music until they are full of song; until they can sing songs from the platform.

First, in teaching how to read literature, let the child know by investigation, and then let him say what he knows until he is in the habit of talking about things that he has found out. Finally the English idiom is put into his mouth. He is kept in school without ever learning a letter. All the time he is talking; he is not allowed to speak incorrectly. By and by the teacher puts a sentence on the board that he has said himself; then it is erased; it is put there again; then erased, and put there again; and finally it is lodged in the child's mind. It is then erased, and the child goes to the board and writes the entire sentence. He never learned the A B C's, but he writes the entire sentence. I would

have you teach music in that way. I would have these children sing in the third, second, and first years all the beautiful songs that can be found in all the branches of study. I would have them sing correctly, never incorrectly; then some day when they were singing a simple song that was very beautiful I would put that on the board, as we put the English sentences on the board. In one year from the time you begin the children will read anything. You do not need any drilling in reading exercises. Read only that which the child has sung well, and read it from the blackboard. See that the child reads it from his inner consciousness, thru his eyes.

The work of the primary school in all branches is to fill the child's sub-consciousness with richness. Take him into the fields; take him to the riverside; take him to the hillside, to the mountain top, to the zoölogical park, to the museum, to the birds' nests, to the teakettle where the vapor is, to the icehouse, to the cars, to the railroad station; take him out and let him fill himself with experience. Do that in everything you teach, and do not fail to do that in music. Do not go to the music book; go instead to the child's knowledge of music, his own singing of the beautiful songs he has learned to sing correctly. Then, in music as in literature, in the fourth and fifth grades of school you will have your pupils singing music as now we have in the fourth and fifth grades our children reading literature.

DISCUSSION

HERBERT GRIGGS, Denver, Colo.—I disapprove very heartily of the idea presented by Superintendent Powell, that education in music, or, in fact, in any branch, can be gained by absorption. A difficulty put before a child does not hurt him; it strengthens him. We all know that too many pupils enter the high school that are mentally incapable of doing the work in the prescribed course of study, because they have not been made to confront and solve for themselves the problems that present themselves daily to a pupil thruout his school life. No person can sing intelligently unless he studies music.

MRS. GASTON BOYD, Newton, Kan.—The etymological meaning of "education" is a leading forth. The idea in education is for the teacher so to lead the child that he may discover and grasp new things for himself. The same method of progression, the same lines of thought, are used in teaching music as in any other branch.

GEORGE H. TAYLOR, Bakersfield, Cal.—The old masters had to work hard for what they attained; in no sense of the word may they be said to have absorbed that knowledge and power, the results of which in these days so charm and elevate humanity. Pupils must be taught to be independent in thought and action in order to prepare them to cope with the world.

MRS. CONSTANCE B. SMITH, Jacksonville, Ill.—If teachers would present music to the lower-grade pupils according to kindergarten methods, the criticism that technical music

is taught too soon would not be heard, tho the same results would be attained. Every music teacher would find it helpful to understand kindergarten methods.

P. C. HAYDEN, Quincy, Ill.—The music we heard from a class in Superintendent Powell's city last year was certainly very beautiful. We were unable to judge of the power they had gained in technical music, however, as they did no reading. In the class we heard yesterday attention was given to both technique and expression; hence, educationally, the latter exercise was the more valuable of the two.

MRS. FRANCES M. CLARK, Ottumwa, Ill.—The child should be led to master the real thought underlying the notation of music. If technical work be stopped, serious difficulties will soon be encountered. Hard study should take place all thru the grades. The pupils should not read notes, notes, notes alone, but methods should be so combined as to give a pleasing variety of work.

A. S. MCPHERRON, Redlands, Cal.—I emphatically do not approve of discarding the reading of music. I think some theory should be taught even in the first years of school. I have never found it possible for pupils to gain musical knowledge by absorption — they must learn to sing by singing, and to read music by reading.

G. M. COLE, Pasadena, Cal.—One object of teaching music is to teach pupils the fundamental principles of music — to make them musically intelligent. The child should learn as much as two kinds of notes — the staff and the G-clef — during the first year of school.

THE NECESSARY EDUCATION OF THE SUPERVISOR

BY MRS. CONSTANCE BARLOW SMITH, JACKSONVILLE, ILL.

Webster says that education means "the result of educating as determined by the knowledge, skill, or discipline of character acquired." The first qualification necessary to good supervision of music is a thoro musical education. A knowledge of musical history, theory, composition, and reading is absolutely necessary. Musical history is intensely interesting to children, and a competent supervisor of music will consider it a duty to teach that the history of the civilized world may be clearly read in the history of music. Without theory we are poor workmen, indeed, and might liken ourselves unto carpenters without hammers. A knowledge of the standard compositions is essential, because one of our principal duties as supervisors is to teach and to conduct chorus. A very few moments' conversation upon the subject of suitable material for high-school choruses will suffice to enable a good musician to predict success or failure for a newly appointed supervisor of music.

If we teach the study of music reading, we must ourselves be readers. Nothing injures our chances of success more surely than proof that we are not masters of the technical part of our profession. Music stands in a reciprocal relation with nearly all other branches of study in the curriculum of common schools. By close observation in schools where sight

singing receives the same amount of attention that other studies do, we not only feel the moral power of music, but become conscious that the music also adds much to the grand scheme of education. "Teaching," says Professor Laurie, "is a grave and serious business. You are engaged in forming the finest, most complex, most subtle thing known to man, viz., a mind." Professor Laurie, therefore, concludes that every teacher ought to study the general laws of mind, viz., psychology. The mind of the child is not that of the adult; he has a psychology of his own. His mind certainly works differently. How? is the question that a good teacher will try to answer. The study of music must be presented upon a psychological basis, carrying the æsthetic side by side with the technique. "Mental science teaches us that all our knowledge is of resemblances and differences;" and I affirm that a good supervisor should keep this fact in mind. The success with which dull pupils are treated is one of the tests of a good teacher. An accurate conception of pitch relation is not confined to brilliant pupils; in fact, a good ear for music is frequently characteristic of dull children. We commit mistakes in teaching all along the line, sometimes attempting too much and sometimes too little; we often teach the class as a whole and not the individual, or the individual and not the class. We may use a method or scheme suitable at one stage of development in teaching children who are passing thru a very different stage. We must have a definite order of procedure. If we look for a moment at the ordinary classification of our faculties, we find that attention is a condition of all mental processes; we cannot observe, recall observations, analyze, classify, combine, or reason from them without attention. If our pupils are not attentive, then surely we and they are wasting time. A competent supervisor or special teacher of music should be well-educated in the science of good government. "A quiet, firm decision, permeated by love and sustained by dignity, will win the hearts of the pupils and guide them safely. All disparity in commanding and forbidding, all hesitation in threatening and punishment, will avenge itself bitterly and cause the teacher much sorrow and regret." Tact is essential and experience valuable. The teacher must be *first*, and the members of the class who are by nature more clamorous than others will have to be supplied with emergency work. If we can govern as well as instruct, we will secure attention first. Observation follows attention, and if our supervisor understands her work and her material, it is possible for a little mouse to run across the floor without intimidating the girls or making the boys wish to break the sixth commandment. We have the power so to direct the attention and talents of our pupils that they will discover the music of nature. "Child study" proves to us that nature's songs and rhythms are attractive to the average child. Thought is awakened and mental activity stimulated in the study of music just as much as in the study of reading. The same mental process is required

for both. After the grand old major scale has been developed by imitation and a symbol learned for each tone of the scale, in primary grades some devices are necessary to make the work attractive, the same as in reading, number, and nature work. Therefore a supervisor should study kindergarten methods, so as to be able to teach the subject of music to little ones thru the medium of games. Right here let me say that, while music should be recreative, we are apt to admire little motion songs to such an extent that we may forget that children of tender years learn easily, and that the first principles of music can be made attractive to them; whereas, if left until the third or fourth year of school, when the children are approaching their restless age, they may think that the subject of music is less important than arithmetic. If the child can read easy exercises and songs, it gives him confidence and assists him to overcome difficulties in other branches of school work. The study of music correlates with reading, in that the same mental process is required for both. When a child sings an exercise, he simply affirms what his judgment is of relation. Let the supervisor be a good reader. Analysis follows perception. Arithmetic develops the reasoning power, hence is a means of intellectual discipline; so, also, does the study of vocal music. The combined problems of tune and time require strict application. Intense thought action is necessary for sight reading, as the tones must be heard mentally before they can be produced by the vocal organs. The power to focus thought is greatly strengthened by sight singing. The reciprocal relation between the study of mathematics and the study of music is the method of thought employed for both. Number is an invisible reality. "Sound exists only as it is transmitted to the mind by the auditory nerve." In both cases we train the mind to deal with things unseen. Nature's songs have become a necessity in our schools, and the supervisor must be a close student of nature. The sun shines brighter, the rain is more musical, the snow more beautiful, the flowers take on a brighter hue, while the songbirds find their only rivals in the children of song. Many beautiful and useful lessons are learned thru the medium of nature's songs. Take, for example, the "Song of the Chrysalis":

I

Upon a maple branch it hung,
A brown and shapeless thing,
Through sun and wind and rain it clung
Where all could see it swing.

II

And when an eager childish hand
The treasure brought away,
It must have been a fairy wand
That touched it where it lay.

III

For all at once a butterfly,
In purple and in gold,
Came slowly from the shell so dry,
Its prison dark and old.

IV

It stood a moment, bright and fair,
And waved its splendid wings,
Then flew into the summer air,
Among the happy things.

V

O blessed sign of joy to come
When we with failing breath
Shall leave, to gain our heavenly home,
The chrysalis of death!

The wonderful lesson of the resurrection is taught by the words, but the lesson is made more impressive and lasting by associating the words with the music. Bible truths are felt and better understood by children when presented to them thru song. A conscientious supervisor of music will study hymnology so that the regular teacher may be assisted in selecting suitable hymns for opening exercises. Music is emotional. We should beware lest we play upon the wrong heartstring. Music is educational. If we cannot assist in developing the science of music, let us make room for those who can. Music is inspirational. It is our duty to inspire the loftiest ambitions possible to man. Why not attempt social reform thru the medium of music in our public schools? If, as one writer says, "Music not only rests and delights the mind, but refines, purifies, and ennobles the heart. Music sweetens the cup of bitterness, softens the hand of poverty, and lightens the heavy burdens of life," we, as supervisors, cannot afford to treat our responsibilities with indifference. It is conceded that a vicious person never sings. Music is not an accomplishment of criminals. "In England the musical societies aggregate 68,000 members; in Germany the aggregate is 79,000 members. In neither country has the name of an anarchist ever been enrolled as a member of a musical society." If we instill into the minds of youth a genuine love of music, for its own sake, fruitful seed is sown from which to reap virtue, truth, patriotism, and a love for the beautiful. All that is beautiful in nature is expressed thru music. Seek and ye shall find, and when ye have found, lead others to the fountain of knowledge, that they also may drink and be refreshed. The sympathy and power of music were recently felt by the representatives of eleven states, when they assembled at the summit of Pike's Peak to celebrate the Fourth of July. The song "America" touched all hearts with a sweet, new understanding of the third verse:

Let music swell the breeze,
And ring from all the trees
Sweet freedom's song.
Let mortal tongues awake,
Let all that breathe partake,
Let rocks their silence break,
The sound prolong.

The "Star-Spangled Banner" has a new significance for some of us since hearing the melody of that song peal from the great organ of the Mormon Tabernacle, skillfully played by the leader of the temple choir. It is hardly necessary to say that for the moment we forgot our differences.

If music is to take its proper place in our schools, it is necessary for the supervisor to have as broad an education as has the regular teacher, which, I regret to say, is not always the case. The supervisor in an American school should speak good English, and should be well-informed upon musical literature, so as to be able to suggest suitable reading matter to be placed in school and public libraries for the use of her school pupils. It is essential that a supervisor of music keep abreast of the times by reading current musical events, so that the children may be informed of important issues. Music belongs to the masses. It is man's birthright. History, experience, life itself shows that music, the most universal of all arts, is a necessity to every normal man, woman, and child. When America becomes a musical nation, the rich and the poor will sing from the same page, and the blind will realize that "music is a prophecy of what life is to be, the rainbow of promise translated out of seeing into hearing." As our responsibilities are great, so also are our opportunities. Shall we not educate ourselves that we may be able to contribute something toward the fulfillment of the prophecy?

DISCUSSION

Mrs. Gaston Boyd, Newton, Kan. — The supervisor of music should be broadly educated, not only in a musical line; his education should be as broad as that of any other teacher. The successful supervisor must understand child nature and the principles of pedagogy. There are many reasons why one may be a fine teacher, but fail as a supervisor. His position is a difficult one. Those interested in the public schools are not unanimous as to the advisability of introducing music in the curricula. Hence one necessary qualification of the supervisor is the power to convince boards of education of the necessity of having music taught in the public schools. Again, the supervisor must have unlimited tact. Many grade teachers have not been well trained to teach the subject of music, and they hesitate to undertake to do so. It is the supervisor's duty to guide and govern such.

WHAT SHOULD CONSTITUTE A COURSE OF MUSIC FOR COUNTY INSTITUTES?

BY MISS KATHRYN E. STONE, ALAMEDA, CAL.

Music, in the department of sight singing, is one of the late introductions into the school curriculum, and probably has not received the careful attention and preparation that some of the other studies have. We often hear of unsatisfactory results in music work thruout the whole country, and I believe the fault lies in the fact that teachers do not bring into play the true philosophy of all teaching. To be effectual, music must be presented with the same broad-mindedness necessary to the successful presentation of any branch of study. Music is in the child, but needs awakening. Remember, we are simply to draw out that which lies within; the fire is there, we simply fan it into a flame.

The county institute offers a fine opportunity to stimulate and excite fresh interest in this important subject. In giving a course of instruction for county institutes there is much to be considered. No prescribed course could fit the needs of every institute. For instance, a course which I would plan for an intellectual center would be entirely different from one planned for an ungraded school on the plains. The conditions and advantages differ widely, and bring forth different requirements. One point is absolutely sure and applies to any locality, and that is that the more practical a course can be made, the greater the benefit derived from it. I should arrange to have teachers do actual schoolroom work, when it is possible, and thus have theory and practice go hand in hand. There is a difference between understanding good methods and having a working knowledge of them. We, as teachers, must have working knowledge—that is power.

Generally, the first thing to be considered is the care of the child's voice. In our schools we are working with weak, growing organs, and we cannot be too careful to protect them in every possible way. The following suggestions I believe to be of very great importance, and are indispensable in securing a good quality of voice. Have children sing very softly, and restrict them in compass. If these two rules are applied in each grade, if pupils sing softly enough, and carry their tones neither too high nor too low, then the voice will only be used in the thin or head register, and the tones of the thick or chest register, which I would avoid using with young children, will not be heard. These two rules must act as one and must be enforced. We shall soon find that we are not only protecting the young, tender voices, but are securing pure tones of beautiful quality, and musical singing will be the result. Let us melt all

voices into one, and always secure quality of tone and not quantity. Never allow one tone to be forced, and remember voice production, whether good or poor, is largely the result of habit. Nature will attend to the development, if we will but protect the voices. Bear in mind that the child voice is physiologically incapable of producing tones that are both powerful and sweet. Keep the voices within the staff, and never dwell on a very high or a very low tone. Approach these seldom, and then just touch them lightly. Be sure no changed or changing voices are strained in any way. Sing often the word "loo," for "loo" is conducive of a beautiful mellow quality. Insist at all times on the correct position of the mouth: heads up, chin down, and lips extended.

Next let me refer to articulation; for distinct articulation produces clear intonation. Train the lips to flexibility. Urge the child to feel that the jaw moves on loose hinges. Bring the thought to his mind that he is singing with his lips and not his throat. The use of the syllables is a help in securing correct articulation. The study and practice of phonics, so generally used in reading, are valuable. The occasional "monotoning" of a poem is an excellent exercise. The methods for securing good articulation in reading will be found helpful in singing. Speak consonants in a bright, crisp manner, and vowels will take care of themselves.

I do not advocate a great number of breathing exercises, for children naturally breathe correctly, and if their attention is drawn to the breath, they are apt to exaggerate the effort and form bad habits. I would give teachers only a few general rules, and dispense with the breathing exercises so often given.

Rote singing is an important branch in primary work. I believe rote singing should be used the first three years of school life, or until children have acquired the ability to learn songs by note. Teachers should sing for the children, but not with them. Train them to listen correctly as well as to sing correctly. When giving an example in song, in one's own voice, be sure to give the best tone quality, correct articulation, and artistic expression. Select songs with the greatest care, and bear in mind that we want to cultivate a high musical taste. We can lay the foundation at once by teaching only the best. Be sure and put into the child's soul something of the soul of music. If songs are written too high or too low, change the key in order to keep voices within the staff. Don't allow children to drag; keep them up to time. Be very careful in the use of the portamento; never allow one careless tone either in the singing voice or the speaking voice.

In sight singing the two units to be considered are tune and time. I should take up these subjects separately and have the institute *do* the actual schoolroom work. Let me bring before your minds four educational principles which are very valuable in the teaching of all music:

first, present the real thing to the child's mind, as an object of thought; second, name it; third, represent it; and fourth, develop it. Teach the scale first by imitation, and remember it cannot be grounded too well; second, name it; third, represent it; and fourth, develop as a whole, and later the relation of its parts. Stimulate thought work, and never allow children to anticipate, but surprise them often. Encourage individual effort from the beginning.

In the teaching of time I advocate most emphatically the use of a metronome, or a swinging pendulum, and believe in beginning the teaching of time early in the first year. We must secure accurate time before we can get artistic time. First establish the mental image of a two-part measure, name it, then represent it, and later develop it with a metronome. Then proceed in the same way with all the simple forms of a two-part measure. Bring out accent with the words strong and weak, and make children feel the accent. Then give tests in time as in tune. I would have the institute actually do this work.

Next combine tune and time in a simple exercise in this manner: first, establish time with metronome; second, sing syllables; third, combine tune and time; fourth, vocalize with a word. After taking up all the simple measures of two-four time, and combining tune and time, I would follow the same plan with four-four time, three-four time, etc.

Develop all difficulties either in tune or time by dictation or by a simple illustration on the board, before taking up the given exercise, and remember to lead from the child's former knowledge. Be sure to bring out accent; for what is rhythm but the regular recurrence of accent? Impress children that the tones are from their voices and the notes are simple representations.

Knowledge of chromatic and minor scales, if followed in this simple manner, leading from the known to the unknown, can very easily be developed. Be sure to direct the pupils in right thinking and practice, and their musical faculties will show surprising development. Lead children to become independent thinkers in music. Half our work should be spent in exciting the minds of the pupils to action.

I have dealt principally with the mere mechanics of music, because this groundwork must be firmly established before we can take up the intellectual side. By a thoro, systematic drill in the two units, as I speak of them, our classes can soon approach the higher plane. Sight reading is merely a means to an end, a stepping-stone to the right musical rendering.

Do not ever teach sight singing with an instrument, for mental development and independence would thereby suffer. Use a pitch pipe very frequently with each practice, and thus keep voices up to correct pitch. Teach all musical characters incidentally up to the fifth grade. Examine voices carefully for part singing, considering range, quality, and

age. Give special care to signs of expression, for singing without expression is like a painting without a shadow. Be sure to plant in the child's soul something of the soul of music. To acquire the unity of song singing, of course the teacher must beat the time. If children have gained the comprehension of absolute, accurate time, they will readily follow the baton.

A few general hints and I will conclude. Have a method and an aim, and see the end at the beginning. Arrange a systematic course of study, and follow it day by day; for, remember, regular work builds up and irregular tears down. Have short, daily lessons, and keep at a principle until it is thoroly understood. Lay your firm foundation in music, as in all else, at the threshold of school life.

It is related of Michael Angelo, the great sculptor, that "while at work he wore fastened on his artist's cap a lighted candle, that no shadow of himself might fall upon his work." It was a beautiful custom and spoke a more eloquent lesson than he realized. How often our shadows fall upon our work!

DISCUSSION

MRS. CONSTANCE B. SMITH, Jacksonville, Ill.—The subject of county institutes is a very important one. The plan which works successfully in my county is very briefly this: A course in music has been adopted in the country schools thruout the county. The teachers come to me for guidance, and to have their lessons marked out, with definite instructions as to what to teach and the best ways of arriving at desired results. In this way a certain uniformity of work is brought about, and better work is done than if there was no definite aim.

MRS. FRANCES M. CLARK, Ottumwa, Ia.—I commend what has been said. The fault of poor articulation seems a very grave one. I have used very satisfactorily a device of Frederick Root—taking the alphabet in pantomime to loosen the vocal organs. I have selected some familiar poem, as "The Psalm of Life," and had the pupils pantomime the words. Sometimes I allow them to select some stanza for themselves, and let me see if they can pantomime the recital of the words so well that I can tell what they are repeating. The country teachers fail mainly in securing thought, and hence expression, from their pupils. To secure this end I have often taught familiar songs, as "The Star-Spangled Banner," or Longfellow's "The Rainy Day," taking as preliminary work the analysis of the meaning and thought so fully as to cause the children to see the picture in the song. Get the thought, and the expression will come—from within.

DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—Wednesday, July 12, 1899

The meeting of the department was called to order in the Young Men's Christian Association Building at 3 P. M. by the president, Allan Davis, Washington, D. C.

The program was opened by a piano solo by Miss Myra Shearer, Los Angeles, Cal.

President Davis gave the annual address, taking as his subject "The Business-Course Problem."

L. E. Eggertsen, Provo City, Utah, presented a paper on the subject, "Necessity for Moral Training in Commercial Colleges." W. H. Sadler, Baltimore, Md., discussed the paper.

"Is English Neglected in the Commercial Schools?" was the subject of a paper presented by W. C. Ramsey, Stockton, Cal. The discussion following was participated in by C. E. Howard, San Francisco, Cal.; W. C. Stevenson, Emporia, Kan., and I. O. Crissy, Albany, N. Y.

C. E. Howard, president of the San Francisco Business College, presented a paper on "How I Conduct a Business-Community School." D. W. Springer, Ann Arbor, Mich., and J. H. Francis, Los Angeles, Cal., participated in the discussion.

The department adjourned to meet July 13.

SECOND SESSION.—Thursday, July 13

The second session of the department convened at 3 P. M., and the program was opened with music by the California-Oregon Quartette, composed of members of the department.

A paper by J. M. Mehan, Des Moines, Ia., on "An Adequate Course of Study for the Business Colleges" was read, in the absence of the author, by D. W. Springer. The department voted to request the United States Commissioner of Education to publish the paper and give it general circulation. Messrs. Davis, Springer, and Crissy were appointed as a committee to make the request for the department.

The question, "What Foreign Languages, if Any, should be Taught in the Commercial Schools?" was freely discussed by the department.

W. H. Sadler, Baltimore, Md., conducted a question box to the edification and enjoyment of all.

The election of officers for the ensuing year resulted as follows:

President—Carl C. Marshall, Battle Creek, Mich.
Vice-President—M. B. Wicks, Philadelphia, Pa.
Secretary—I. O. Crissy, Albany, N. Y.
Chairman, Executive Committee—W. C. Stevenson, Emporia, Kan.

Adjourned to meet July 14.

THIRD SESSION.—Friday, July 14

The session was called to order at 3 P. M. by President Davis.

The orchestra of the business department of the Los Angeles High School rendered most pleasing selections.

W. C. Stevenson, department of bookkeeping and penmanship, Kansas State Normal School, read a paper on "The Advent of the Commercial High School." The paper was discussed by D. W. Springer, of the Ann Arbor (Mich.) High School.

A paper on "Claims of Commercial Education to a Place in Our Public-School System" was presented by J. H. Francis, of the commercial department of the Los Angeles High School. Carl C. Marshall, Battle Creek, Mich., discussed the paper.

I. O. Crissy, of the board of regents of the University of New York, presented a paper on "Evolution of Business Education." The paper was discussed by D. T. Ames and E. R. Shrader.

"The Future of the Business College" was the subject of a paper by George E. Morrill, Watsonville, Cal.

A vote of thanks was extended to the local executive committee and citizens of Los Angeles for hospitality extended to the department.

The president-elect spoke of the next meeting, and expressed his thanks for the honor conferred upon him.

Adjourned.

W. C. Stevenson,
Secretary.

PAPERS AND DISCUSSIONS

THE BUSINESS-COURSE PROBLEM

BY ALLAN DAVIS, PRINCIPAL OF BUSINESS HIGH SCHOOL, WASHINGTON, D. C.

With the growth in complexity of modern business methods, with the natural trade extension which comes to a country that is more than able to supply the home demand for products of many kinds, with the territorial growth consequent upon our late war, has come a demand for American business agents and managers of a higher order of general education and a more special knowledge of industrial and commercial conditions. To meet this demand the leading universities of our two largest cities have just inserted commercial courses into their curricula; the school boards in many cities have taken the question under consideration, and in a few instances have established high-school courses of more or less thoroness. Indeed, the chief problem in high-school organization today is that of the coming commercial course. Courses in literature, the classics, the sciences, and even in manual training, have been at least provisionally determined, but the business course is in most cities still merely a product of the imagination.

Foreign courses which might be chosen as models for American business schools seem to have two defects: they are professional rather than educational, and their studies are not unified so as to serve as a guide in the establishment of high-school courses. The course of the average American business college is also objectionable as a model, for it is not, and

does not pretend to be, more than an adjunct to a general education. Hence the formulation of a full high-school commercial course is almost entirely a labor of creation.

It has often been charged that a commercial course is a professional course which has no place in a public-school system. If this charge of professionalism be true, I believe that the conclusion is just; but it seems to me that the premises are false. The high-school pupil who studies geometry, physics, and Latin, and who, upon leaving school, decides to pursue medicine as a profession, has not been professionally or specially educated by the state. Neither has the boy who obtains at school a knowledge of bookkeeping, commercial law, and business arithmetic, and who, after an apprenticeship as clerk or assistant, becomes a hardware merchant. Neither geometry nor arithmetic, physics nor business law, bookkeeping nor Latin, is necessarily a professional or special study. This important distinction between professional or special and general training is perfectly obvious: the one is intended to fit for special occupations only; the other is designed to be useful to all, whatever their future occupations. Judged by this standard, a business training is a typical illustration of general education, as division of labor has made each member of society a business-man to a greater or less degree.

The technical training appropriate to varying trades or professions being omitted, then, as without the scope of the public secondary school, the first essential of a business course is "business training," using the term in its ordinary signification to include business records, forms, customs, calculations, and correspondence. Today shorthand and typewriting may, perhaps, also justly claim a place in a business course, for, altho not a necessary part of a business-man's education, familiarity with them is frequently valuable, notwithstanding that twenty years ago these subjects were so little employed in business that it would have been premature to teach them. This group of studies, which is simple and immediately useful, is, in fact, the curriculum of the ordinary business college.

A complete business course may be briefly described as giving a knowledge of (1) men, (2) things, (3) language, and (4) business: of human history and institutions, of nature, of means of expressing thought, and of business laws and methods.

A historical course which exhibits the general history of the race, its commercial history, the geography of commerce, and the simpler laws of political economy will, perhaps, include all that should be expected of historical training in a high school.

Mathematics and the sciences are so clearly defined in most high-school programs that no explanation is necessary here.

In determining how much language should be taught, attention must be paid to the fact that the course does not specially prepare for college

or the learned professions. English should be emphasized; Latin should, perhaps, be taught for one year as an aid to English, especially in the derivation of words; and Spanish, German, or French for perhaps two years. Aside from its commercial value, which is far less in the United States than in Europe, and which of itself would not justify retention among high-school studies, the chief use of a foreign language seems to lie in giving a better understanding of English by furnishing the student with material for comparison. In this connection the following quotation from Macaulay seems especially appropriate: "If a man must terminate his studies at one-and-twenty, we should in general advise him to be satisfied with the modern languages. If he is forced to enter active life at fifteen or sixteen, we should think it best that he should confine himself almost entirely to his native tongue." Equally instructive is the statement of the chief reporter of the United States House of Representatives, who, after years of experience in recording the language of men of varying degrees of education, says in an article on the qualifications of the congressional reporter: "Some acquaintance, not necessarily profound, with other languages, especially Latin and French, can hardly be dispensed with."

It is also worthy of note that drawing, the language of mechanical representation, is perhaps generally enough employed to warrant its introduction.

Several essential subjects which are usually included in a high-school course are nominally omitted from the foregoing sketch, altho in reality implied. Thus manual training, altho subordinated to business training and to science, is almost as fully included as in a manual-training course; the bookkeeping, penmanship, drawing, shorthand, and typewriting of the business group, and the more original manipulations required for the experiments and comparisons of science, representing fully the manual phase of education. Logic, rhetoric, and moral training are implicit in almost every subject, and are best taught in connection with the things or relations to which they pertain — are, in fact, quite likely to be poorly taught to the ordinary student when separated from the concrete and taught abstractly.

As a provisional course of four years, embodying the foregoing subjects, the following is suggested:

	First Year	Second Year	Third Year	Fourth Year
I Business Training	Bookkeeping, arithmetic, and correspondence Shorthand and typewriting (optional)	Bookkeeping, arithmetic, and correspondence or Shorthand and typewriting	Bookkeeping, arithmetic, and correspondence (optional) Shorthand and typewriting (optional)	Technical business law
II Language	English	Latin	Spanish, English	Spanish, drawing
III History	General history	Commercial history	Commercial geography	Political economy
IV Mathematics and Science	Algebra	Geometry, physics	Chemistry	Biology

HOW I CONDUCT A BUSINESS-COMMUNITY SCHOOL

BY C. E. HOWARD, PRESIDENT SAN FRANCISCO BUSINESS COLLEGE, SAN FRANCISCO, CAL.

I shall not attempt this afternoon to tell you how an ideal business-community school should be conducted, but I shall confine myself, as indicated by the title of this paper, to telling you how I actually conduct one.

Our school, as far as bookkeeping is concerned, consists solely of the business community, or actual business department, without any preliminary work in a theory department; for I belong to a class of those who think that the sooner the student gets to doing what you expect him to do, the sooner will he learn to do it.

When the student enters the school the first morning, we give him his outfit of stationery, with a list of the articles, and instruct him to examine the bill and check up the items to see if all the articles are there, and to add the bill in order to see that it is correct. After this is done the student is given a form for an opening entry, which he is instructed to write in his journal, substituting name and address for those given in the form. As soon as he has finished this he is given a capital of $5,000 of

college money, and is shown how to make out a deposit slip for the use of the bank. He is taken to the bank and initiated into the process of making a cash deposit. He is required to take every step, and to sign every book, and to answer such questions as are propounded to the business-man at the regular commercial banks. Having returned to his desk, he is instructed to pay his first month's rent, which he does by drawing a check in favor of the real-estate agent. The principle underlying the use of the check is explained to him, and, having actually placed the money in the bank and received the credit for it, he needs but a few words of explanation in regard to his check, and the manner of accounting for the withdrawal of this amount of money. This is the great secret which underlies this plan of teaching — that the student actually performs each transaction in its proper order, and sees the relation of each part of the transaction and of each separate transaction to all the others.

He is next instructed to buy a bill of merchandise for cash. In order that we may have a check upon the student's work during the first two or three days, his first fifteen bills of merchandise are bought by the means of printed order sheets, which are supplied to him, and by means of which we know just what he ought to get. Upon receiving his bill of merchandise, he is shown how to check up the cards belonging to it, and to verify the extensions, footings, and discounts, and how to "O K" and file the invoice. With this in his mind he is shown the proper entries to make on his books, with an explanation of the principles of debit and credit, as applied to the two accounts, cash and merchandise, which are involved in this transaction. The merchandise bought on the first bill is sold for cash on two separate bills to different students, and, on issuing the bill and receiving the check or currency in payment therefor, he is shown how to receipt the bill, and his attention is called to the importance of doing this work properly in the case of all cash transactions.

When he has bought six bills and sold the merchandise so received, he discontinues further transactions until after posting and taking a trial balance. We find that even with the exceedingly brief explanation of the principles of debit and credit, involving the two accounts given the student, he acquires the ability to journalize correctly any transaction involving these two accounts. He has not worried his head about acquiring any part of the "science of accounts," but he has learned, what is of vastly more importance to him, how to perform and record the transactions.

In posting from the journal, we find that the students are able to do the work with very little liability to error, by posting the succeeding debits in order, then returning and taking all the credits in like manner. While this method is not new, and is not followed by all, we think it is departed from to the student's detriment every time. I doubt if there is a teacher in the house who has not had his soul harried time after time

by misfit trial balances, caused by the student's having posted an item to the wrong side. This does not occur once a month with us.

After the posting has been completed, after completing his trial balance and recording in the balance-book, the cash is compared with the bank account, balanced and ruled, and the student returns to his transactions. In this section of the work the bills-payable account is introduced by having the student buy a portion of his merchandise for notes on demand. The subject is discussed with him after he has bought the first bill in this way; his attention is called to the principle of debit and credit applying to the new account. Its identity with the principle as applied to the cash and merchandise is pointed out, and the use of the bill-book explained. A small number of transactions are made, the accounts are again posted, the cash account is balanced and ruled as before, and a new set of transactions is entered upon. Personal accounts receivable are introduced thru the means of bills sold on credit. At the end of this set he will have exhausted his fifteen order sheets. After a trial balance is taken, a statement or balance sheet is made, and the books are closed. In the fourth set the only new subjects are personal accounts payable, and the use of drafts drawn on the accounts receivable.

All of our first sets are short, so that the student will not lose sight of the work as a whole during the entire set. Each succeeding set becomes a little longer, and each set contains one or two new principles, with a large amount of practice of those already known. My ideas of correct grading, as applied to school studies, is that the student should never realize he has come to anything hard. I presume that this opinion will be dissented from by those who believe that the greatest mental discipline is secured by giving the students hard nuts to crack. This may be true in regard to some studies, but I do not believe that in bookkeeping and its allied studies it is so. I believe that if a student's work is properly graded he will rise step by step from known facts to the unknown, in such a manner as to teach him to reason *a priori* in regard to any transaction with which he may be confronted. It is our desire that the student shall acquire a symmetrical and integral knowledge of the subject, and we fail to see that this end is secured by placing arduous difficulties in the way, for the purpose of mental discipline. We insure proper grading of the subject by preparing the transactions that form the basis of the course in such a way that the student is forced to take them in the order in which we have laid them down. If, in teaching a given subject, we can lay down the principles plainly in the correct order, and insure the student's following them in that order, he cannot, if possessed of common observation and reason, avoid the conclusion we wish him to reach. We attain this end in our course by arranging the basic transactions on a roll of paper, which is contained in a pasteboard case with an opening in one side, covered with glass. This roll is provided with a turn-screw at one

side, which turns the roll forward, but cannot be turned backward. This appliance is the cabinet which has been the innocent cause of so much hilarity on the part of those who have appliances to sell which are a little different. This is "making bookkeepers by turning a crank," which has been so derided by some of the venerable advocates of some other system of teaching. It simply resolves itself into this: the student is, by means of this appliance, given a set of business transactions to be followed; the transactions are arranged in the order in which we wish them taken; and, as he must take them in the order in which they are given, he cannot, as I have said before, if possessed of ordinary intelligence, avoid the conclusion we wish him to reach.

At this point I should like to call your attention to what I consider one of the most important features of the business-community, or, as we have called it, for the want of a better name, the "actual-business" plan of teaching. It is this: the transactions laid down in the cabinet furnish only about one-third of the material that is written in the books of the student. The plan of actual face-to-face transaction from the very beginning causes a large number of transactions to arise which are entirely independent of the cabinet, and which differ on the books of all the different students. For instance, A may give B a note, as instructed by the cabinet. B is instructed by the cabinet to sell the note to a third party, which he does; that party is instructed to secure the payment of the interest from the drawer, or to secure a partial payment of the principal, or perhaps to discount the note in the bank, and the interest may be demanded by the bank; any of which will call for an entry on A's books which is not demanded by the cabinet. A sells to B on account. B is instructed to make a partial payment on the account by means of a note, or to pay the account by a draft on a third party. Transactions may be cited, none of which appear on the cabinet of A, except the original instruction. As a consequence he must be ready at all times to take care of any kind of transaction that may be brought to him, and thus receives a continual review of everything he has gone over. This is an advantage that can be secured in no plan of teaching except the business-community or actual-business plan. No student knows the course that his business is going to take, neither does the teacher. There are certain transactions involving the use of the various principles and accounts which are common to the course of all the students, but this common course forms only in all 30 per cent. of the entire material written during the course.

We use but two separate offices, the bank and wholesale house; commission, forwarding, and such work as is taken up in some schools in separate offices are carried on at the desk of the individual student whenever he has reached a point calling for these subjects. This, perhaps, does not make as imposing a show to the prospective student, when he enters the schoolroom, as a large number of finely appointed offices with plenty of

plate glass and brass rails, but it suits our purpose of conducting a plain, matter-of-fact, straight business-training school, with no frills or fripperies.

We require all bills sold on account to be sold subject to draft, unless the instructions specially provide otherwise. All bills on account are to be settled every second Friday. This is called "collection day." Each student is required on this day to see that his books are posted, and to make out and send to each debtor a statement of account to date. In this way all open accounts are closed at the end of two weeks. In thus adopting two collection days each month we follow an old California custom of early days, when steamers were the only regular means of communication with this state; all accounts were made up so as to send remittances on the steamers, which sailed semimonthly. These dates of sailing came to be known as "steamer days," or "collection days," and, altho the reason for it has long since passed away, the custom still continues in San Francisco among a large class of merchants. The dates have now been settled as the thirteenth and twenty-eighth, unless these dates occur on Saturday or Sunday, when collections are made the following Monday. This plan of semimonthly collections prevents errors in books from becoming buried under a mass of work. An error in a personal account is bound to appear at this time, unless each party has made an exactly opposite error, which is very rarely, if ever, done.

This brings up a point which is always a question in the minds of those who are not familiar with the actual-business plan of teaching. They invariably ask: "What check do you have on your students? How do you know they are doing their work correctly?" An error in the personal account is sure to be discovered on settling day, as shown before. The work is so carried out in the room that each student is always ready to prove his work correct, and in case of a dispute each will immediately produce his vouchers, and the one who is wrong cannot help acknowledging the error. This point — that of the natural discovery of errors, the proof of the account by the vouchers, and the means of checking vouchers and accounts together to detect the discrepancy — cannot be reached by any other plan of teaching.

Every account on the books representing a resource or a liability can be proved in a similar way. There is but one class of errors that can pass undetected, and that is where an error of computation in an invoice is unnoticed. This mistake is not, however, an error in the accounts, and could pass thru any house in the business world in the same way. It is possible for an error to be made by posting to one loss-and-gain account instead of another, which might remain undetected, but this would have absolutely no effect on the financial results of the business.

It is a pleasure to see students of this kind of work promptly produce their vouchers in settlement of questions which frequently arise. We

require all advanced students, at some time in the course, to take the books of five other students and give a complete audit of them, verifying every account for a period of three months. In joint-stock and corporation work the corporations are made up among the students who subscribe for the stock, and at closings of the books an auditing committee is appointed and required to audit the books of the corporation.

A rigid inspection of books is carried out, and a strict compliance with the laws and customs of business is insisted on. No allowance is made for the fact that it is only school work. Everything undertaken by the student must be done to the best of his ability.

We eliminate, as far as possible, the schoolroom atmosphere, and substitute for it the customs of the office. It becomes with us a workroom more than a schoolroom. There is a point I should like to mention here, and it is a very important one in connection with business-community, or actual-business, teaching, and that is the question of personal order in the schoolroom. It is very gratifying to us that every visitor who is himself a business teacher or a public-school teacher, or who is familiar with schoolroom work, commends us for the order displayed in our schoolrooms. It is the more gratifying, and the more a cause of self-congratulation, because it is secured at the expense of a small amount of special effort. This is a point of the greatest importance with this kind of work. Order, if not, as has been said before, "heaven's first law," is at least the first law of business; and without order in the schoolroom the business college fails in its first requirement. We find that the greatest factor in the question is to give the students something to do, to make it practical—something that teaches them what they want to learn; present it to them as one man would present a thing to another, and carry the idea thru all our work that the relation of teacher to student is simply the relation of one business-man to another; and you have reached the goal.

This is the attitude which we take with our students from the start, and the collisions between the teachers and the students are exceedingly rare. Not infrequently weeks pass without a single word from the teacher to the students, except in the regular routine of instruction. The students imbibe in the very first day's experience in the schoolroom the idea that it is a place for work, and that they are on their honor to do their best; and the trust is seldom violated. When, in rare instances, we find a student that is not amenable to this kind of treatment, we regulate the difficulty by removing the offender.

THE CLAIMS OF BUSINESS EDUCATION TO A PLACE IN OUR PUBLIC SCHOOLS

BY J. H. FRANCIS, HEAD OF COMMERCIAL DEPARTMENT, LOS ANGELES HIGH SCHOOL, LOS ANGELES, CAL.

Some years ago those who felt that the responsibility for the world's education rested on them looked with dignified disfavor, if not with disdain, on the claims mathematics were making for recognition in the courses of study. Such an innovation would lessen the time and dissipate the efforts given to the only studies which could properly give to one a liberal education and entitle him to a place among the learned men of the world. Newton emerged one day from the recesses of his study with a table of figures that made of astrology the science of astronomy, and the impetus given to the mathematical branch of learning carried it with a triumphant sweep into the courses of study, where it has since been developed to an almost abnormal extent.

A few years later the social and industrial evolution that grew into revolution brought forward some problems the solution of which could not be found in the languages, nor yet in abstract mathematics, but lay within the fields of what we designate science. This new subject was given the same cold and hostile reception from those who stood guard over treasuries of knowledge, and was denied a seat among the respectable branches of learning; but since, despite the fact that some people will to the contrary, the world moves onward, the subject of science would not be put aside until duly recognized and accorded a place. A glance at the present courses of study, with statistics of enrollment, will answer the question of the need for such work in our public schools.

Educators, like other men, change their habits and thoughts slowly. Believing it safer to work with the known and established than experiment with the unknown, they have followed the ways marked out for them by generations of ancestry until, rudely disturbed by the jostling events of a progressing world, they have frowned upon, opposed, studied, and then adopted those things that conditions forced upon them.

There is today, standing at the door of learning, what is called commercial education, asking in no unmistakable tones for a place in the already overcrowded and heavily burdened curricula of public schools. Its reception has been much the same as that accorded to all new departures in educational lines. Probably in this case, however, more consideration has been shown to it from the start than to other intruders, due to the fact that business colleges have paved the way for its introduction, and intensified conditions in the commercial world have made it imperative.

We might almost say at this time that this new line of educational work has secured its place, and the only question profitable for discussion would be how best to strengthen and perfect it.

I thought it not unwise, however, despite the progress already made in the introduction of such work into the schools of our land, to emphasize some of the fundamental reasons for its growth, which is certainly destined to be steady and swift in the near future.

It will be understood that I have in mind the introduction of commercial work not earlier than the ninth year. There may be grounds for good discussion on the beginning of specialization earlier than this. Probably experience and study will lead to specialization early in the school life of pupils. It began beyond the university course, moved down to it, and from there to secondary education, or into the high schools. Just why it should stop here is probably not definitely known, altho there may be some good reasons for it based on expediency, and possibly on educational grounds.

Granting that specialization in the high schools needs no defense, and that it is educationally correct to offer to high-school pupils the option of as many courses as possible, the question whether the commercial should form one of such courses would depend upon the answer given to the following questions:

1. Should courses of study be influenced by dominant characteristics or forces in the civilization of the people educated?

2. Is commercialism one of the dominant characteristics or forces of our civilization?

3. What is put into a commercial course, and what is sought to be accomplished in such a course?

There are two things to be considered in all education: first, society in general, and, second, the individual in particular.

In the general sense it is true that what is good for society is good for the individuals composing that society, and the reverse; but it is not always specifically so. It may be an excellent thing for the individual to possess a technical knowledge in certain industrial pursuits, and the good of such training would be partly contributed to society, but it would be a question raised by the public whether the good derived by it from a technical training of certain of its members would recompense for the outlay necessary to such a training.

Education is socialistic. It is paid for by the social unit, whatever that may be, and to this unit is due the benefits to be derived from such expenditure. If society is economical in its expenditures, it will demand, not only some returns, but the highest returns for its expenditure of money and effort.

In this connection the word "practical," so often used, and too frequently ignorantly used, by advocates of commercial education, is

worth noting. Because a commercial education fitting young men or women to go from school into a store or an office may make it practical or may not, it does not necessarily follow that it is practical. It may be practical, in a limited sense, for the young student without being so for the society that educates him. It may be quite the opposite for both. I have known those who possessed, or thought they possessed, a business education, and the possession, or delusion, was most unfortunate for them and for society. It made of what might have been an intelligent and valuable citizen a very poor clerk or amanuensis.

From the society standpoint, then, are we justified in asking that a commercial course form a part of our public-school work? I should answer the question in the affirmative. In doing this we should not be ignorant of the gravity of the fact that our public schools are already badly crowded with studies, all of them possessing merits, and many of them dignified with years of experience and age. All new departures must prove themselves more advantageous to society than the established studies and courses, and to do this requires no little courage in the face of the great and rapid progress the world has made, due not a little to the educational systems of civilization.

It is not a display of wide educational attainments nor of good educational discernment to anathematize present courses of study as being impractical because they fail to fit their recipients to earn bread and butter. All studies are bread-and-butter studies — some more than others, to be sure, but all helpful in the struggle of life. Commercial education, if it is to make and hold for itself a permanent place in our educational systems, must accomplish more than to enable its few pupils to make immediate application of their knowledge and receive remuneration for such ability. It must fill a place in the economic organization of society by producing those who can become society leaders in commercial lines.

Commercial education is needed in the public schools of this country because we as a nation are already one of the greatest commercial peoples in the world. This is due to our natural resources, our climate, location, and to the energy of our people. Commerce has assumed such dimensions that it has outrun the comprehension of casual students, and requires a most careful and systematic study of the fundamental principles and their modifications underlying the great structure of exchange. We all believe that this commercial tendency is destined to continue its marvelous growth in the future. It will be of invaluable service to this nation to have those who have been especially trained along these lines.

A good illustration of what those educated in special lines can do for the country that educates them can be seen in the prestige Germany has won in the last few years in the commercial world. This is due in large part to the systematic study she has made of the questions of commerce.

The commercial high schools established by her people are conclusive proof that she appreciates the importance of the hour and is determined to hold her place in the fierce struggle the nations are making for the markets of the world.

At no other time in our history has this country stood in so great a need of men who from training and study were prepared to be leaders in questions of commerce.

The new possessions that have fallen to us; the opening up of new world markets such as South America, Africa, and the Orient; the remarkable industrial evolution in our own country that has placed us in the very fore rank of commercial nations — these have all raised questions the solution of which will require intellects especially trained for the purpose.

There has been some sentiment against commercial education, because it has been held that the very best education for business is the one acquired in the store or office. If it be true that for any specific work the best preparation is the one secured in the business itself, from a sociological standpoint it would still be a very imperative necessity to educate a class of our citizens along the lines of commerce. Fortunately, however, the sentiment against commercial education, on the ground that it fails to fit as well for business as experience in the store, is disappearing. Men must realize that, while such an education cannot make business-men of all who take it, either the course of study or the teaching of it must be radically wrong if it does not make a better business-man of him who takes it than he otherwise would have been.

It would hardly be questioned, by those conversant with the facts, that our foreign commerce receives a consideration in the press, in legislation, and in study out of proportion to its importance, but the problems of foreign commerce are nevertheless of the greatest importance, and were never so important as at present. France and Germany select commissions of trained, capable men, send them to the Orient for a three-years' study of these markets, and keep secret their reports save to their citizens who can profit by this valuable information. The consular service of the European commercial nations is composed of men fitted by study for their positions. Our own country must give much more intelligent thought to these things in the future, and if we are to have young men who can do this work, we must educate them for it. The boundless wealth, marvelous growth, and tireless energy of the people of this nation have elicited the admiration and wonder of the world, but we cannot afford to depend too largely on these advantages to secure and hold a place among the nations of the world. Lines of competition are drawn more closely between nations. The struggle of the future will not be on the battlefields, but in the arena of trades, markets, and exchanges. The victory will belong to the nations that make the most careful study of the conditions. This means that

opportunity must be given to the American youth to study these questions in our universities, colleges, and high schools.

When we look at our domestic commerce, the questions raised are of tenfold importance, and the need for men who can intelligently handle them becomes of gravest moment to the country. The most daring business-men of the seventeenth century would stand appalled at the business ventures of today. We are utterly unable to grasp the full significance of some of the recent developments in business lines. Concentration, corporations, trusts, and monopolies are sweeping our business-men off their feet, and confusing and troubling the entire business world. These questions will not be understood by the majority of business-men who have had training in one line only. It will require a broader and more liberal study of the questions of commerce than can be secured while meeting the demands of an active business life. This training must be secured in our schools. Society will be compelled, from the very conditions that surround her, to educate some of her citizens to deal with exchange, one of the greatest divisions of human endeavor, one that vitally touches every other, upon which every other is largely dependent.

Probably in no other of the fundamental divisions of human activity are there such foolish methods employed, entailing such reckless waste, as in that of exchange. The tribute society pays every year to this reckless waste, if properly conserved, would cover the field of industry with a smile of prosperity that would discount those promised by the most partisan press on a partisan victory. This condition results, without a doubt, from the lack of study of commerce, and will be corrected only by such study.

The legislation touching exchange is a mass of unclassified stuff, good, bad, and indifferent. This legislation was passed by men who did not understand the problems of commerce, men whose lives have been given to the mastery of another profession. It is not much wonder, then, at the viciousness of some of our legislation and the utter worthlessness of more touching exchange. Men who do not themselves understand the problems upon which they legislate are more than prone to be influenced by others. The influence exerted here has not been wholesome for the business-man at large. Society owes it to herself to educate men who can take their places in our legislative halls, and pass laws that will, in the broadest sense, be for the good of business; and society will not have met such an obligation to herself until she sees to it that such men are put in these places and meet these obligations in a candid, straightforward, and intelligent manner.

Some good people regret the commercialism of this age and this nation. Educators stoutly maintain that we must educate away from the controlling forces of society, on the ground that those forces and conditions are not ideal, and it is the business of education to strive for the

ideal. Culture has been the keyword to their system, and they yield to the material only with reluctance. The contention of this class of educators is not without weight, partly because of the very excellent men and women who advocate the idea, and partly because of the idea itself. But whether we rejoice in or regret the almost superhuman efforts today being expended in the business world, we must all realize their force and significance. To undertake to educate the youth of this land away from these forces and environments is hopeless, if not foolish. The most brilliant intellects are found struggling for supremacy and mastery here. So long as the business world offers such tempting prizes, such great power, such intense excitement, young men of ambition will refuse an education that aims to be so ethical as to lift their minds into realms above and beyond the material things of life. Law, medicine, and theology, the once honored professions, have yielded much of their honor to the profession of business, and this has come about naturally, since in the fields of business lies the most promising future, viewed from almost any standpoint. Under present conditions and environments the only efficient, and hence the only sensible, way to correct any evil tendencies toward over-commercialism, is to educate young men and women in the fundamentals of commerce, depending on the good sense and sterling American manhood to correct such evils when once thoroly understood.

Added to the above society reasons for the permanency of commercial education as a part of our public-school work is the tremendous fact that commerce or business touches vitally every individual within the pale of civilization; and this is the most potent reason for such a course of study. It is a serious question if our public schools can afford to allow our young people to go into the active duties of life with no knowledge of business methods or business principles. It makes no difference what is to be one's vocation; a business education will be of great value; hence the time spent in a commercial course, if a good one, and if the time be well spent, cannot be time lost. In fact, it could hardly be better spent. It is this feature of the work that must secure for it a place in our public schools.

From the standpoint of society I have no doubt that the introduction of commercial education is thoroly justified, and that it has come to stay. The forces that are most dominant in the life of man must be studied to be understood. A failure to understand them means a destruction of our civic and economic life. The study of the arts no doubt has its merits in the ethical training of the race, and the languages are keys that will unlock vast storehouses of valuable information ; but what this present age most stands in need of is men and women who can intelligently understand the mighty forces that are driving it so rapidly onward. The past has its lessons, the present its problems. To study the past for its lessons in order that the problems of the present may more wisely be solved is profitable, but unfortunately the pursuit of present courses of

study is not calculated to find the lessons of the past as applied to the civic and economic life of man. The solution of the present problems is imperative, and hence a direct study of them must become a part of our public-school work.

I have already dwelt so long on the sociological side of the question that the individual side can only be mentioned. After all, however, commercial work will or will not form a part of public-school work according to whether it does or does not answer a need of society.

Much of what has been said in favor of such an education from the standpoint of society will apply to the individual. If one has ambitions to engage in the busy, intense, struggling world of business under present conditions, he certainly needs as much preparation as possible. Ninety-five per cent. of the men who venture into this field of activity are said to be swept aside by the surging forces that rage in the world of business. There is hardly any doubt that much of this failure is due to an imperfect understanding of business principles. A commercial education ought to do much toward giving young men and women a comprehensive view of the field and instilling principles that will be of much value to them in their future business lives.

For the student in general, who is not determined as to what his future work shall be, I am persuaded that he cannot spend time and effort in a more profitable way than in the pursuit of a commercial education.

The second question raised in this paper, that of whether commercialism is a part of our present civilization and one of the dominant forces of our national life, answers itself, and needs no discussion before this body of business educators. A little over a century ago we were a nation of three millions who loved liberty; today we are seventy millions who love money. We have given up the worship of Almighty God for the worship of the almighty dollar, and the historian of future years will write us down as belonging to the dollar age.

The third and final question raised, that of the objects sought and studies to be followed in a commercial course, is of the greatest importance, and while I should like very much to hear it discussed, it does not fall properly within the province of this paper, even if there was time left for its discussion.

I desire to say, however, that if commercial education limits the scope of its ambition to turning out clerks and office boys, in my opinion it should be ruled out of every public school in the land. The work should be sufficiently thoro and technical to enable the pupils to make immediate application of it in keeping books or doing work in shorthand and typewriting, but such an education must aim at something far more significant than this, if it is to be paid for by the public and to return to the public value received. It must put the boy and girl into intelligent sympathy with the vast business world around them. It must be

liberalizing, educational, and calculated to call out of the student his best mental powers. It must never lose sight of pedagogical principles, nor be unmindful that the first duty of any educational system or course of study should be the unfolding of the mental powers of the child. It must produce intelligent citizens who can deal with the problems that face this nation, and hence must contain those studies, and follow methods that will appeal to the citizen side of the pupil. It must develop business-men rather than office boys and clerks.

What studies and methods are best calculated to accomplish these results is a question that is today receiving the earnest thought of those interested in a commercial education. Fortunately, the subject is beginning to challenge the interest and thought of able men. On our own great western coast commercial education has received an impetus, by the establishment of a college of commerce at our state university, that will carry it rapidly toward a more perfect organization, and give it greater credit with educators. Here, again, the West has given to the East a lesson in progressiveness.

We are today in the experimental stage, but the next few years will see a remarkable development in this line of educational work. Our great universities are already turning their attention to the work. Conditions demand it. Young men and women of ambition who desire to teach will find a most promising and delightful field of work here.

DISCUSSION

CARL C. MARSHALL, editor of *Learning by Doing*, Battle Creek, Mich.— All right education comprehends one or both of two fundamental purposes, *culture* and *capability*. Whatsoever is not of these is not education. Culture is the degree of approach physically, mentally, and morally to the ideal human being. Capability is the power to perform useful service.

In considering anything that it is proposed to have taught in the public schools, there are two questions to be asked: (1) Does the pursuit of this branch add to the student's intelligence, refinement, and nobility of character? (2) Will it increase his efficiency as a self-supporting member of society? If it does either of these to any considerable degree, it is worthy of a place in the public-school curriculum. If it tends to confer both culture and capability, its value and importance are all the greater.

The existing school curriculum is mainly the product of tradition. It has come down to us from an age when education was merely a matter of selecting accomplishments for the wealthy or the aristocratic. The educated man was not expected to work. He did not need to. He was a "gentleman," which meant — and still means in a considerable region of the world — a man who is supported by an inherited income or other special privilege. For such, education was merely a caste distinction, something to mark its fortunate possessor as being above the vulgar herd. Hence the old schools were given over to teaching accomplishments mainly, as literature, the languages, history, poetry,

music, dancing, fencing, chess play, and the like. Mathematics, sciences, the mechanic arts, and most other branches of knowledge that had to do with the useful trades and professions had small place in the educational scheme, being considered plebeian and unworthy the attention of the sons and daughters of gentlemen. Hence the cultivated man of the centuries that are past was accomplished but ignorant. He could strum a harp, discourse in bad Latin, or compose a sonnet to his mistress' eyebrow, but he did not know his multiplication table, could hardly write his own name, and his orthography was even more picturesque than that of the deformed spelling recommended by the National Educational Association committee.

The coming of the democratic age brought a demand that education should no longer be the exclusive privilege of the rich or the aristocratic, and the free school was born. But only by slow degrees did it occur to educators that the new régime required a change in the forms and purposes of education. Stubbornly the college maintained the all-sufficiency of the old classical training, and resisted the encroachment and growing popularity of the scientific and technical branches. The limitations of the common schools precluded Latin and philosophy, but the educational purveyors found in Lindlay Murray's grammar scheme and the old elementary spelling-book substitutes equally scholastic and useless. These were reinforced by bulky compendiums of arithmetic and geography, and finally by text-books in all kinds of *ologies*, the name and number of which were determined soley by the whims of local school boards or of state legislatures. In all of this knowledge-cramming and the exploitation of ornamental learning were as of old the chief processes. In few places have we had a calm, judicious selection of these branches of study that help people to live.

Indeed, we have had a steadily pressed contention that direct preparation for usefulness is no part of the proper purpose of public education. It has been constantly dinned into our ears that education is a means of mental and spiritual development, and that it suffers degradation by association with any question as to how men shall be fed or wherewithal shall they be clothed.

Not long since I heard an eminent educator sneer at the idea of adding stenography and business training to the school curriculum, because these branches, as he phrased it, belong to "a bread-and-butter education."

This prejudice against the practical still persists with many of our educators, who concede no educative value to work, as distinguished from learning. To give precision and effectiveness to a boy's muscles they recommend the gymnasium instead of the workshop, and prefer to train his sense of the mathematical equities thru algebra rather than accounting.

They can see fine discipline in writing out Greek verbs or difficult chemical reactions, in scheduling the Merovingian dynasty or in working out the complex riddles of algebra or geometry; but see nothing educational in the preparation of balance sheets or financial statements, the analysis of the elements of valid contracts, or the painstaking mastery of the accurate and beautiful art of stenography.

Commercial teachers know the educational value of the so-called commercial branches, and can afford to smile at the scholastic ignoramuses who sneer at "bread-and-butter education." No one, of course, assumes that these branches afford in themselves a complete education, but that all of them are educative in the best sense none who know them will deny.

The English training given in our best commercial schools may not fit students for turning out heavy essays on profound philosophic, sociological, or political topics, but it trains them to spell, to punctuate, to write plain, direct, well-composed letters, and, in short, to use the language in the way they will need to use it in real life. There is fine thought-training in the study of business law and usage, as well as valuable knowledge. Commercial mathematics may not be so intricate as the unapplied abstractions of algebra or geometry, but it calls for equal concentration of mind and accuracy of calculation. Those

who have adjusted a complicated account-current or found the amount due on a note with partial payments can understand this. So with commercial and time discounts, the arbitrament of exchanges, partnership settlements, and many other matters of commercial arithmetic and accountancy. I have known students to "fall down" before them who had won college honors in the so-called "higher mathematics."

It is not contended, of course, that the commercial branches yield much of what the educational technologists call culture, but in the development of judgment in practical affairs, the logical faculty, and prompt acting capability in the everyday exigencies of life their value is unsurpassed.

A commonly urged objection to public business education is that it is in the nature of special education, and that it is no more the province of the public schools to turn out trained bookkeepers or stenographers than it is to supply dentists, or jewelers, or photographers, or apothecaries. This objection would hold good if business training were of no use to any but bookkeepers or stenographers; but, as a matter of fact, there is no kind of knowledge or training that is of broader application. There is hardly a calling in life where familiarity with and facility in business methods and affairs are not of the utmost service. Even stenography — which comes nearer to being a specialty than anything else included in a commercial course — has a wide range of useful applications outside the business office. As a useful accomplishment it is certainly worth vastly more than any branch of science or foreign language, modern or ancient.

We therefore emphatically demur to the contention that the commercial branches come under the head of class or special education. They are beyond comparison clearer of this charge than are many of the branches which from time immemorial have made up the bulk of our high-school and college curriculum. How many people have a use for bookkeeping as compared to those who need Greek or Latin? Which is most serviceable to the mass of men, a knowledge of contracts or of logarithms, familiarity with modern industries, commerce, and methods of transportation, or information about Grecian mythology, the Athenian legends, or the Saracenic wars? Mind you, I urge naught against the learning of the historian and the *littérateur*. Neither would I bar this learning from the public schools. I want them broad enough for everybody, and to include not only the best training for the scholar, but for the man of practical affairs as well.

In my opinion, the custodians of our public-school system have erred in promulgating and conserving the one form of education to the neglect of the other. Man has a body as well as a soul; his eyes may be on the stars, but his feet are in the dust. He is bound during this life to physical necessity. He needs poetry and music and philosophy; he also needs bread and beefsteaks and warm flannels. Of the two classes of wants the physical is the more urgent. Maintenance is the first necessity. Unless a man have wealth, no amount of culture will compensate for his inability to make a living. As wealth is for the few, the many must work; and the better their work, the more successful their lives.

A scheme of schooling for the masses of men must, therefore, include training for self-maintenance as a prime educational necessity. The most foreboding thing about our present social condition is the vast number of young men and women who, after going to school for ten or twelve years, are still unable to earn a living. Unrestricted foreign immigration has killed off the old apprentice system of our fathers, and today the American boy seldom has a chance to learn a good trade. The business office presents the best opening, but seldom is he fitted for its duties; he can neither write nor spell nor add, and does not know an invoice from a bill of lading. The little street gamin who has sold newspapers and blacked shoes instead of going to school has a better chance than the boy from the schools when it comes to getting work. Under these conditions the practical value of our advanced graded schools and high schools would be greatly enhanced by the addition of certain of the commercial branches, even if it were necessary to drop some of the ornate fads.

The United States is already the first commercial country of the globe. Our industrial products are making undreamed-of conquests in foreign markets. We are selling locomotives and steel rails to England and watches to Switzerland. We are rapidly becoming the granary and food storehouse of the world. There are a half dozen countries of Europe whose populations would in less than three months be at the starving point if cut off from the food supply of America.

Our domestic commerce defies all computation. Within a decade or so our population will pass the hundred-million mark, and we shall attain among the nations a commercial and industrial supremacy unexampled in all history.

This outlook shows infallibly the direction which our lines of popular education should take. This is to be a commercial and industrial nation, and without subtracting from their offered opportunites for the broadest culture, our schools should fit the coming citizen for his work and his heritage.

THE EVOLUTION OF BUSINESS EDUCATION

BY I. O. CRISSY, INSPECTOR OF BUSINESS EDUCATION FOR THE STATE OF NEW YORK

It is difficult to fix a place or date for the beginning of business education. In a sense its beginning may be regarded as coeval with that of commerce itself; but in the sense in which I shall speak of it, I would place the beginning of business education in the fifteenth century, and in the city of Florence. I place it there because it was there that the earliest known text-books on commercial subjects were written, and because to Florence we owe the science of double-entry bookkeeping. Yet, while these facts indicate a demand for information on business subjects, there is no evidence of any attempt at systematic instruction in business outside the counting-house, in Florence or elsewhere, until we reach the latter half of the eighteenth century.

The first movement in the direction of systematic business education in schools seems to have been made in Austria. As early as 1762 a few courses of lectures on business subjects were opened in high schools; and a year later the Vienna university offered a course in financial science. But as all these courses were avowedly for the preparation of civil officers for financial and administrative positions, the merchants were not satisfied; and in 1769 the Vienna board of trade declared that the education of men for mercantile pursuits was being neglected. This movement resulted in the founding of the Commercial Academy, a subsidized state school for training merchants, which continued, with various changes, down to 1865, when it was superseded by the Vienna City Commercial Academy, now one of the leading commercial schools of the world. But meantime, in 1840, Johann Geyer had opened a private business school, which was imitated in the principal cities of the empire; while other

privately founded schools of a lower order came into existence, and, encouraged by state aid, have proved an important factor in the general educational system.

In Germany the first business school seems to have been opened by a citizen named Busch, who, near the end of the eighteenth century, established in Hamburg, at his own expense, the Academy of Commerce, which became quite prosperous, and was followed by similar schools in other German cities.

The Public Commercial Institute at Leipzig is specially interesting as being the oldest existing business school of Germany, and probably the best. It owed its organization and early maintenance to the Leipzig merchant guild, which placed it, with an endowment, in charge of the chamber of commerce in 1831. It is subsidized by the chamber and by the state. The institute has three departments. The first is for apprentices of Leipzig commercial houses who show fitness to take up the work; and the second for other students, who must be fourteen years old and pass entrance examinations in German, French, geography, history, and arithmetic. The course in each of these departments covers three years. The third department, also called the professional department, has a course of one year. The subjects taught are: German, English, French, arithmetic, bookkeeping and office work, geography, correspondence, and penmanship, in the first department; to which are added, for the second department, physics, mechanical technology, chemistry, study of products, history, commercial law, economics, drawing, and arithmetic, with Italian, Spanish, and stenography as electives; while in the third department English, French, Spanish, commercial arithmetic, commercial legislation, bookkeeping, correspondence (in different languages), political economy, commercial history, and study of products are subjects for intensive work.

It is worthy of note that in February of last year the University of Leipzig announced the opening of a college of commerce.

The beginning and growth of business schools in France are very similar to those of Germany. There are now in France seven higher and four secondary schools of commerce, besides numerous schools of an elementary character. The better schools receive subsidies, and their courses of study, which are practically the same as those of the Leipzig institute, are mostly for three years, the minimum age of entrance being fifteen. Students, led by instructors, make excursions to places of commercial interest and make written reports thereon, the best reports being awarded traveling scholarships.

We must now give a moment to Belgium, where was established, in Antwerp, in 1852, the Higher Institute, or university of commerce, claimed to be the first, in order of time, among the schools of university grade. It is managed and maintained by the city council, the government paying one-third of the expense. A letter and accompanying prospectus received

last month from Director Grandgaignage show that the greatest stress is given to what we would call business practice, fifteen hours a week being devoted to it thru the entire two years of the regular course, out of the thirty-five hours (average) devoted to all subjects. In other respects the course is quite similar to that of the Leipzig institute. Altho the regular course at Antwerp is nominally two years, there is a preparatory course; and quite recently a third year has been added for higher commercial science, and specially for preparing young men for consular positions. A considerable number of native graduates receive traveling stipends of $1,000 to $1,500 a year, in consideration of a three-years' residence abroad.

In Italy the public-school law of 1859 provided for commercial education in the public technical schools, of which there are about sixty. In 1871 was opened, in Venice, the Royal Higher School of Commerce, which holds the rank of a university. Many other Italian cities now have higher schools of commerce. The school at Turin is eighteen years old, has sixty classes, and sixty-four teachers. In 1895 it graduated 1,300 students, men and women. Switzerland, Holland, Russia, and Japan have also some good business schools.

It is only within the last decade that any serious attention has been given to business education in England. The inroads recently made by continental countries in markets which the English had monopolized, and the fact that German clerks are occupying important places in London commercial houses, have at last caused an awakening.

The total number of business schools in the United States, as reported to the National Bureau of Education in 1872, was sixty-seven, which number is exceeded at the present time by New York alone. Mr. Packard estimated the number of students then in the business schools thruout the country at 20,000. The number of schools reported in 1896 was 398; number of students, 80,662. The report for 1897, the last available, shows a slight falling off, both in attendance and number of schools. But not all of the schools report; and the estimate made last year by President Springer, that there are 100,000 students attending the private business schools, is probably near the fact.

From records of the national bureau it appears that Dolbear's Commercial College, organized in the city of New York in 1835, was the first institution in this country devoted exclusively to business education. At first prevailing public sentiment did not favor such a school. Business-men scouted the idea that boys could get any knowledge of business in a school. But, chiefly thru penmanship I think, these schools obtained some patronage, and eventually it was rather grudgingly admitted that they could teach bookkeeping. When it came to be generally believed that there was "money in it," there soon grew up an unprincipled exploitation of the field of business education which has left a lasting

stigma on the name "business college," and done much to disgrace and discredit an honorable profession. In New York that title, which the "faker" has made obnoxious, is being quietly dropped, and the less pretentious, but more dignified and appropriate names, institute, academy, and school, are taking its place.

I said a moment ago I would speak further of England. I take my text from an article by Rt. Hon. James Bryce, M.P., published in the June issue of the *North American Review*. I have not the time to make any extended quotations; but will simply glance at the course of study which the author suggests for a boy leaving the common schools at thirteen or fourteen, and desiring to enter an office or warehouse at the earliest possible moment. The subjects given are: (1) practical mastery of commercial arithmetic, with special training in mental calculation; (2) the elements of commercial geography; (3) a modern language, French, German, or Spanish; (4) shorthand and bookkeeping; (5) English composition. No time is fixed for the completion of this course. The author simply recommends that instruction be given in "one or more of the subjects mentioned."

As a course of study this is certainly a curiosity; but it seems to me chiefly valuable as showing what must be the condition of business education in England, in view of the fact that the suggested "course" comes from the pen of a distinguished writer, member of Parliament, and eminent man of affairs, and, above all, a close observer and investigator. Commenting on No. 4 of the course, he says: "Some high authorities doubt whether bookkeeping can be profitably taught before the boy has entered an office and seen what books are for." This statement and the course of study suggested naturally incline the American reader to resent the author's remark, earlier in his paper, that business education in England and America is, broadly speaking, on the same plane.

I wish Mr. Bryce might spend a day in an up-to-date American business school. A visit to the banks, the commercial emporium, the commission house, the shipping office, the insurance and real-estate agencies, the jobbing house, and the post-office of such a school would convince him that its students have ample opportunity, not only to see "what books are for," but to use them in recording transactions as tangible and real as any in the business life of the outside world. I admit that we are yet only in the development stage as to higher business education, but we are a long way in advance of those "high authorities" who "doubt whether bookkeeping can be profitably taught before the boy has entered an office."

But, while making these criticisms, I have only praise for the pervading spirit of Mr. Bryce's paper. He vindicates the honor and emphasizes the importance of the commercial calling, and shows a thoro appreciation of the value of sound business education.

In making comparisons between American business schools and those of continental Europe — particularly those of Germany — the fact should be kept in mind that Germany has been working in recent years toward one definite and clearly defined object, viz., to enlarge the market for her products. A great impulse was given to German industries by the large indemnity paid by France in consequence of the war of 1870; but the actual forward movement began directly after our Centennial Exposition at Philadelphia, where Germany learned that her products were shamefully inferior to exhibits of other countries. Bismarck knew that if Germany would find good markets she must produce good wares. So, just as Prussia, after her crushing defeat by Napoleon I., had begun to prepare for the inevitable recoupment by educating her people, the empire now began to prepare in the same way for the coming commercial war. The result was, thruout the twenty-six German states, the most elaborate system of industrial schools ever seen in any country. It is the outcome of that educational campaign that has awakened England. Furthermore, Germany, when she had thus paved the way to insure the quality of her products, set about increasing the number and raising the quality of her business schools, so that she might have an army of educated and technically trained men to make a market for those products. Thus it has happened that, while we have been training bookkeepers and stenographers and clerks, speaking one language, Germany and her continental neighbors have been training also consuls and traveling agents able to speak fluently the language and to understand completely the trade customs of the country to which they are sent.

Until recently these things have not greatly interested England and the United States. England felt secure as the mistress of the world's commerce, and we rested quite content with the vastness of our home market. Now a great change is taking place. England must put forth supreme efforts to retain what she has enjoyed; and we can scarcely doubt, in the light of recent developments, that we shall soon be struggling fiercely for an outlet for our ever-increasing products.

These conditions demand that we should not be handicapped at the outset by lack of preparation. Given an equal chance in linguistic and technical training, the quick-witted and alert American will hold his own, and a little more, in any market under the sun.

Already we have made a good beginning for higher business education. The Wharton School has been at work for years; Chicago University and California University have each a college of commerce; and now, under the auspices of the New York chamber of commerce, Columbia opens her doors for the same purpose.

In tracing the evolution of business education, we have seen that in all countries it has usually found its first expression in private enterprise. Subsidies by commercial associations and by the state have followed, and,

finally, the state has made commercial schools a part of its general educational system. What has occurred in other and older countries is now taking place in America. Bookkeeping has been taught in our academies and high schools, and, to some extent, in public elementary schools for years; and now commercial courses in public high schools are becoming common in most of the states. Nor is this all. Separate high schools devoted entirely to commercial education are being established. Just now, while I am preparing this paper, I have been advised that the public-school authorities of New York city, not content with commercial courses in the three high schools, have determined to establish, in a large new building, a separate commercial high school, with a course of four years; and a similar project is under discussion for the borough of Brooklyn.

The time at my disposal will not permit me to discuss the question of business education in public tax-supported schools. I may say, however, that I recognize that there is a demand in this country for free business education. Whether right or wrong, the demand is here, and it has evidently come to stay. I will also say, in this connection, that a technical business education alone is not a sufficient education. Our foremost object must be to make strong and well-balanced men and women, and good citizens; the making of good merchants and trained commercial leaders must always remain subordinate to this, unless it can be co-ordinate with it; and this consideration must be reckoned with in any course of study. Perhaps the strongest argument for a commercial course in the high school is the apparent fact that there is a considerable class of students that cannot be held there without it.

Then, must the proprietary business school go? Has it become *functus officio?* By no means; there will be work enough left for all the honest and efficient schools. To these schools naturally belongs the instruction of a large class of persons who for any reason think themselves shut out from all other sources of instruction; and the night sessions, which most of the private business schools maintain, are a distinct good to the community. The other and higher line of work is to give to the high-school student, graduated in the usual course, a thoro technical business education. The increasing demand for business education will require vastly increased facilities.

In New York we are working out the problem, as we believe, to the mutual advantage of the student and the school. The university of the state, better known, perhaps, as the State Board of Regents, offers, as an incentive to more thoro business education, a credential known as the state business diploma, which may be obtained by high-school graduates (or others having an equivalent education) after spending a year in a registered business school and passing examinations conducted by the university. These tests cover advanced bookkeeping, business arithmetic,

business practice, and office methods; commercial law, commercial geography, and history of commerce; and business English; and cover them in a very thoro way.

The business diploma, earned in the way I have outlined, is of great value. Given under the seal of the university, which is honored in every civilized country, it bears evidence that the person whose name it certifies has received a sound general education, and has added thereto a thoro technical business training. A state stenographer's diploma is also granted to high-school graduates passing the 125-word test in stenography, and the tests in typewriting and business English; and furthermore, in order that proved ability may receive recognition irrespective of conditions, the university will grant certificates, either in business or stenography, to candidates who simply pass the diploma examinations.

The university registers such reputable business schools as are found on inspection to have the necessary equipment and teaching force to maintain courses for the state diploma, and issues to these schools formal certificates of registration. By this means any person may be informed as to what schools have been officially approved. Registration certificates remain in force for one year, unless sooner canceled for cause, and are renewed only on inspection. Of the seventy-three proprietary business schools in the state, twenty-six have been granted registration.

The first examinations under the new rules were offered a year ago; but as the time had not been sufficient to prepare for the diploma, only a small number of candidates for the certificates appeared, and none of these obtained credentials. In the examinations for the present year, June 13–15, candidates were more numerous, the largest number from any one school for the business credentials being twenty, from the Heffley School in Brooklyn, while the Henley, of Syracuse, entered forty-five for the stenographers' credentials. Only a small part of the answer papers sent up have yet been examined, but enough has been ascertained to make it certain that a considerable number of state credentials have been earned this year.

I may say in this connection that expressions of satisfaction have been received from many of the registered schools. Their proprietors say that registration has given them a dignity and standing that has been distinctly beneficial, while their students are inspired by the offer of state credentials to work harder and to reach better results. The fact that their work is subjected to a uniform test from a source entirely apart from those who give the instruction, and yet along lines clearly defined by the published syllabus, has greatly enlarged the confidence of the public in these schools. It is realized that at last there is an authoritative standard for business education, and that a diploma from the state has a higher significance than any school credential. Some of the managers say that the standards have been so high that they have been unable to offer

candidates for the state credentials; yet there is scarcely a suggestion that these standards should be lowered, and the practically unanimous expression is that there will be stronger work done next year. I feel assured that our plan has now passed beyond the experimental stage, and that a full measure of success awaits it.

THE ADVENT OF THE COMMERCIAL HIGH SCHOOL

BY W. C. STEVENSON, DEPARTMENT OF BOOKKEEPING AND PENMANSHIP, STATE NORMAL SCHOOL, EMPORIA, KAN.

Public sentiment, the mind universal, when once awakened to a public need, is as irresistible as the current of Niagara, and a free people moving along the line of thoughtful conviction makes no mistake. From the rudest of beginnings in colonial times has grown our splendid educational system of today. The universities, colleges, high schools, industrial schools, normal schools, agricultural colleges, professional schools, and the United States naval and military academies, are all the growth of the impulses which prompted our forefathers to establish schools for the development and perpetuity of the principles of liberty. Who today can question the wisdom of any of these great educational departments? Who can say that the graduate of West Point, or Annapolis, or of a first-class agricultural college or industrial school, possesses less of true culture or world-knowledge, or is less prepared for his work in life, or is less truly educated, in all that the term implies, or is less prepared to benefit mankind or himself, than the graduate of the time-honored classical courses? Hail to the courses in manual training, business training, domestic science, agriculture, mining, and polytechnics, which give to our educational system elasticity, utility, and congruity!

With the recognition of equal value accorded to various kinds of schools has come the recognition of various types of mind, and the necessity for a selection of studies which will develop latent possibilities and contribute to the highest success of the individual. In higher institutions of learning the principle of electives is well established. It takes over forty years to complete all the courses offered by Harvard. The arguments for the principle of electives in higher education apply as well to secondary education, and the time has come when public sentiment is in revolt against high-school courses that are prepared solely with a view of admission to the classical courses of the college or university, and which all students are required to follow, irrespective of their present environments or their probable future.

The spontaneous sentiment in favor of the commercial high school

which has found expression in all parts of our country within the past two years reveals the strength and universality of the feeling that the schools are not meeting the demands of the times, and must be made to impart something of direct value to the ninety-and-nine who go into business pursuits, as well as to the one who goes into the profession of law, medicine, teaching, or the ministry. The main strength of the movement for the commercial high school is not in the teachers who advocate it, nor in the professional men who have received a splendid special training for their work in the schools already established, but it comes from the young, vigorous American business-man, who is not so far removed from his schooling in the secondary school as to have forgotten what it failed to give him. In evidence of this demand I quote the expressions of the New York chamber of commerce and others, which show the extent and strength of the movement, and should convince the most skeptical of the inevitable establishment and growth of commercial education in this country.

The New York chamber of commerce recently adopted the following resolutions:

WHEREAS, The modern conditions of commerce and industry require wider knowledge and higher education on the part of business-men;

WHEREAS, The present educational facilities offered to business-men are inadequate and fail to equip them for competition in the world's commerce;

Resolved, That the chamber of commerce of the state of New York earnestly favors the establishment and development of sounder commercial education, both in secondary schools and higher institutions of learning.

Superintendent W. H. Maxwell, of Greater New York, in advocating the establishment of commercial high schools before the chamber of commerce said:

I cannot refrain from expressing the hope that the University of Columbia, whose distinguished president is a member of the chamber of commerce, will at no distant day establish, side by side with its school of arts, side by side with its school of applied sciences, a great commercial school that will open its doors to those who have completed a secondary education. Such a school would undoubtedly be largely patronized, and would wield a tremendous influence, not only in promoting the interests of commerce itself, but in promoting commercial education in schools of lower rank.

Superintendent Smith, of St. Paul, in a recent communication to his school board says:

Many cities are seriously considering radical changes in their courses of study, and a strong influence is working in favor of the introduction of business instruction. The time has come when a demand of this kind can be no longer ignored. When we consider that nine-tenths of the boys attending school must enter upon some kind of industrial or commercial undertaking, we may reasonably conclude that the recognition of this fact, and a course of instruction in accordance with it, are in no wise special, but, on the contrary, must be regarded as general.

The Educational Commission of the city of Chicago, appointed by

Mayor Harrison, and of which President Harper of the University of Chicago is chairman, in a recent report said:

> The need of a commercial high school may be seen in the decreasing proportion of boys in the secondary schools, a fact due in part to a failure to furnish the kind of instruction adapted to them. Your commission is so fully persuaded of the importance of this action that we recommend that the first expansion of the school system take this form, and that, at the earliest possible date, a public high school be established, with a course of study extending through at least four years, planned to afford a liberal training, and at the same time to prepare its pupils for the various kinds of business activity, and to qualify them for the highest positions in the commercial world.

Says Edward Brooks, superintendant of schools of Philadelphia: "We organized a commercial high school last year, and look with favor upon it, because it is the form of education demanded by the times."

Similar reports come from Cleveland, O., and other cities of progressive tendencies. A few announce the intention of meeting the demand by enlarging the makeshift commercial course which now exists in nearly every high school, and which, under the shadow of other courses, with little or no encouragement from the "powers that be," with the cheapest teachers and the poorest rooms, has done little more than demonstrate its right to exist. The Washington, D. C., Business High School, with its separate building, a progressive faculty, and an independent course, affords us a splendid example of the possibilities of business training under favorable conditions.

Perhaps the most encouraging feature of the agitation for the commercial high school is the changing attitude of the teachers of the older courses in higher institutions of learning. Professor E. J. James, of the University of Chicago, who, by his writings and study of the great commercial systems of Europe, has done more for business education than any score of men that could be named, voiced the sentiment of intelligent collegians generally when he said:

> We can conquer the educated and half-educated people of this country for secondary and higher education only by offering them courses of study which, while they are of a strictly educational character in the best sense of the word, shall also have some bearing on their future everyday life, shall have some direct relation to the work they are called upon to do in the world.

A professor of Latin in a state institution of learning said to me recently:

> I favor commercial high schools and commercial courses in higher institutions of learning, not only because I think they are needed, but because their establishment will directly and indirectly help the classical courses.

The platitudes, "Education is for life," "Education must shun materialism," "The shop is early at war with the school," are not so frequent in educational literature as formerly. Yet there is a large class of educationists who agree with the following gem from the writings of a note professor:

> Mental muscle, discipline, may be developed without a single item of information being obtained as such, and it may be cultivated in a more pleasant and scientific way, if the utilitarian idea of obtaining information be not present.

Contrast that with the words of John Ruskin:

> I believe that which is most profitable to know, it is also most profitable to learn, and the science which it is the highest power to possess it is also the best exercise to acquire.

I hold it to be self-evident that it is the duty of the nation to give every citizen an education that will not only make him a better citizen, but will assist him to achieve the highest possible success; and, while it is true that success is due to natural ability and circumstances as well as to education, yet the turning-point between success and failure is so small that, in these days of intense competition, nations must equip for life by giving a training in the schools that will have a direct as well as a disciplinary bearing on life's problems.

The aphorism, "Our nation needs trained leadership," is a current phrase heard from pulpit and rostrum, and re-echoed by teachers everywhere, but the interpretation of the same seems to be, leadership in public policy or the professions only. We need leadership as fully trained for commerce and finance as in letters and politics. There is certainly an incongruity in teaching civil law and international law, which cannot be of direct use to $\frac{1}{1000}$ per cent. of the population, and ignoring commercial law and the science of domestic and international commerce, that would be of direct and permanent value to almost every student in the schools.

The average high-school teacher, principal, or superintendent has no liking for the commercial branches. His thought is principally on the beauties of literature, the profundity of philosophy, the science of pedagogy, or the redemption of the world. When asked about the value or advisability of introducing a commercial course, he usually approves with an air of condescension. He has persistently disregarded the expressed wishes of school boards with respect to commercial work, because, if the pupils were to be prepared for admission to the university, there was no time for other work; and, with the entire machinery of the school directed toward preparing for courses in higher institutions, is it to be wondered at that young business departments in such surroundings should fail to grow? Yet, with shorter courses and weaker equipment in many respects, the business college, standing alone, has grown until it has been recognized as a most important element in our great educational system. The work of the business colleges and their large fee-paying constituency, together with the reports from the great commercial schools of France and Germany, and the phenomenal success of those countries in international trade, have awakened the great cities of our country to the fact that our high schools are not giving any real business training. The

boy who graduates from the average high school lacks in essential business qualifications. He is not methodical, nor accurate, nor observant of details, and he cannot solve the simplest problem in bookkeeping. Indeed, few of the teachers are able to discount a note drawing interest. They are helpless before the most common business transactions, and excuse themselves by calling them "puzzles." Teachers of reputation argue in support of the fallacy that "interest is money paid for the use of money," and a superintendent of high rank was unable to explain a partnership settlement involving a reappraisement of property, altho capable of winning the applause of assembled pedagogs with profound dissertations on "the cuteness of children," "tabulated results of examination of the eyesight of two thousand children," or "tabulated results of the effects on the race of the children's tendency to suck their big toes," etc.

The teachers in commercial high schools should be men of affairs, active business-men, with all the qualifications of teachers in other departments in addition, if possible. The practicing lawyer and physician are the best teachers in their respective schools. As well place a bull in a china shop as a classical graduate, with a penchant for poetry and the higher criticism, and with no practical experience or inclination toward business affairs, in the commercial department. Some attempts in the line of establishing such departments have been especially ridiculous for this reason. The spirit of the teacher of the business high school should incline toward business affairs rather than toward scholasticism. When he attends the National Educational Association with his friend, the teacher of sciences or the classics, he prefers to visit the factories, the administrative offices, and note the pulse of trade, while his friend properly visits the museums and art galleries. Find me a teacher in a business school who has never visited a factory nor examined its methods, who has never visited a real bank or a real business house, nor looked into their books, makes no investments nor looks for any, and I will show you a theorist and a fraud. The teacher of science who teaches from books alone is a poor teacher, and the same is doubly true of the teacher of business.

Passing over the current arguments for the commercial high school, relating to justice from the taxpayer's point of view, the state's need of trained men for foreign commerce, the need of the individuals themselves, the need of something to induce the young men to go to school, etc., I will say that to my mind the strongest argument in favor of business training is its moral effect. What, commercial education a moral training? Yes, my friend of "higher motive" reasoning, it will do for the nine boys what your teaching has done for one. It will, by appealing to the lower motives of securing business prosperity thru economy, thrift, and health, do more to root out tobacco using, gambling, idleness, and spendthrift habits than all your preaching, however

eloquent. Time will not permit an enlargement of this thought. Reflect on it, however, and look for the boys of your acquaintance who are showing ideal results from their high-school training. Search among the classes of society that stand highest in the public esteem as exemplars of the moral virtues, for examples of unconscious business laxity — and reflect, reflect!

The commercial life will absorb the great majority of the pupils who enter the high school. Then the commercial high school is needed. The course of study will not differ materially from that now in the high schools, but its purpose and thoroness will be much different. Reading, spelling, writing, arithmetic, English, composition, correspondence, and bookkeeping will be taught for *use*. Then, when the students can be encouraged to build upon this foundation, give them the studies that are both utilitarian and culture-giving — industrial geography, study of the products of commerce, commercial law, history of transportation, banking, and trade, shorthand and typewriting, civil government, elements of political economy, American literature, general history, one or two modern languages *for use*, natural philosophy, chemistry as used in the industrial arts, and United States and English history. Students trained in such a course will go forth from the schoolrooms without dread of the "cold, cold world." They will know and understand their limitations, and their hopes and ambitions will lead them to "do great things, not dream them all day long."

The commercial high school is here. It is based on principles eternal, and is a product of the heart universal. Business is becoming recognized as more than secularity. Its mission is no less divine than teaching or preaching. It may be above and beyond the realm of mere materialism. The study of it, giving power to earn a living, and advancing our national commercial prosperity, may also develop character and become a means of grace; and so long as ambition lives in the hearts of men, or a government exists by the people and for the people, so long will the light of education *for use*, falling upon the fields of human toil and the pathway of human sorrow, help to transform earth into a suburb of the New Jerusalem.

DEPARTMENT OF CHILD STUDY

SECRETARY'S MINUTES

FIRST SESSION.— WEDNESDAY, JULY 12, 1899

The department met in the First Congregational Church, with the president, Will S. Monroe, of Massachusetts, in the chair.

After briefly welcoming the audience, the president read the following notice :

A reception will be tendered to the members and friends of the Child Study Department at the State Normal School on Thursday evening, July 13, from 7 : 30 to 10 o'clock.

In the absence of the secretary, Mrs. Alice W. Cooley, Miss Mary L. Gilman, Minneapolis, Minn., acted as secretary.

During the session a telegram was received from the vice-president, Professor Reuben Post Halleck, of Kentucky, regretting the necessity of his absence, and sending cordial greetings to the department.

The president appointed E. G. Lancaster, Colorado Springs, Colo., vice-president.

A letter received from Miss Kate Stevens, secretary of the London branch of the British Child Study Association, conveyed words of greeting to the department.

A telegram from the New York Child Study Society, in session, expressed cordial greetings.

The president appointed the following nominating committee :

G. W. A. Luckey, of Nebraska. Herman T. Lukens, of Pennsylvania.
E. G. Lancaster, of Colorado.

The following program was presented :

"Status of Child Study in Europe," by Will S. Monroe, State Normal School, Westfield, Mass.

"Child Study in Normal and Training Schools," by Miss Gertrude Edmund, principal of Training School, Lowell, Mass.

"The Adolescent at Home and in School," by E. G. Lancaster, Colorado College, Colorado Springs, Colo.

"Child Study: The Missing Link between the Home and the School," by Miss Anna B. Thomas, State Normal School, California, Pa.

SECOND SESSION.— THURSDAY, JULY 13

The department was called to order by the president at 3 P. M., and the following program presented :

"Children's Interest in Literature," by Miss Isabel Lawrence, State Normal School, St. Cloud, Minn.

"Children's Drawings," by Mrs. Louise Maitland, State Normal School, San José, Cal.

"A Curriculum of Applied Child Study for the Kindergarten and the Primary School," by Mr. Frederic Burk, superintendent of schools, Santa Barbara, Cal.

"Racial Traits in the Group Activity of Children," by Mr. C. C. Van Liew, State Normal School, Los Angeles, Cal.

The report of the Committee on Nominations was as follows:

For *President*— Frederic Burk, president State Normal School, San Francisco, Cal.
For *Vice-President*— Louis H. Galbreath, Charleston, Ill.
For *Secretary*— Miss Celestia S. Parrish, Lynchburg, Va.

Signed { G. W. A. Luckey, H. T. Lukens, E. G. Lancaster, *Committee.*

The officers named were duly elected by the department.
Meeting adjourned.

Mary L. Gilman,
Secretary.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS[1]

Will S. Monroe, of the State Normal School, Westfield, Mass., took as the thesis of his presidential address the "Status of Child Study in Europe." Communications were read from Miss Kate Stevens, of London, England; M. Gabriel Compayré, of Lyons, France; and Dr. Joseph Stimpfl, of Bamberg, Germany. These communications outlined clearly the activity in child study in these countries of Europe. An extended account was also given of the child-study movement in Italy, together with brief summaries of the recent Italian literature on the subject. This address on the status of child study in Europe is published entire in the *Pedagogical Seminary*, September, 1899, Vol. VI, pp. 372–81.

CHILD STUDY IN NORMAL AND TRAINING SCHOOLS

BY GERTRUDE EDMUND, PRINCIPAL OF TRAINING SCHOOL, LOWELL, MASS.

It is encouraging to note that many of the newer, as well as several of the older, professional schools have called to their chairs of psychology and pedagogy men and women of college training who are not unfamiliar with biology or the history of philosophy and religion; who know something of savage myth, custom, and belief; the instinct of the animals; the psychology of the deaf, blind, idiotic, insane, and criminal classes, as well as of the normal adult — men and women especially prepared because of their earnest, sympathetic love for childhood and youth. The child is not apt to suffer materially when doctors of philosophy tell us that they have "fallen in love" with the children whom they are studying, with the "naïve, artless, fresh faith and willingness of childhood;"

[1] [It is a matter of regret that the large number and the unusual length of papers submitted in this department has made necessary the omission of the president's address, and the abridgment and omission of several others.—Editor.]

when teachers are taught to revere the spontaneity, rhythm, poetry, and originality of the little child, and to appeal to his feelings, his interests, his loves.

As New Englanders we take pride in pointing to Massachusetts as the original home of child study, and in telling our good friends of the West that a large number of their child-study leaders passed thru the portals of Clark University; but we have to acknowledge that the new movement has taken root more vigorously in the virgin soil of the West, and it is a significant fact that many of our eastern workers have been touched by the spirit of western push and enterprise. Outside of Clark University and its summer school, I know of nothing in the East to compare with the child-study congresses of Chicago—with the work of Colonel Parker as president of the Illinois Child Study Society, or with that of Professor Barnes, of the Pacific coast.

Judging from letters, pamphlets, articles in magazines, and visits to various schools, there is a wholesome interest in child study from the pine trees of Maine to the peaceful waters of the Pacific. From Farmington, Principal Purington writes: "All of our psychology is taught with reference to the child, and opinions advanced in those classes are verified or contradicted as far as may be by observation of the children." "So far as I can claim any philosophy of education, it is based on child development," says Dr. Van Liew, of Los Angeles. Fifteen leading graduates of the Worcester Normal, the first professional school to introduce child study, have told me that the work they did in child study, more than anything else, helped toward making them unconscious of themselves, leading them into all-round observation of childhood, and desirous of helping humanity.

The Trenton State Normal has molded, to a large extent, the schools of New Jersey, and out of nearly two score graduates, now teachers in good standing, with whom I have personal acquaintance, I have never met one who did not speak with enthusiasm of the work of Miss Williams in collecting returns for Dr. Hall's questionnaire. Said a prominent principal: "Even if these returns proved of no value for scientific purposes, they served their primary purpose in turning our minds to the hearts of childhood."

Dr. Jenny B. Merrill, superintendent of kindergartens, New York city, formerly instructor of pedagogy in the Normal College, and Dr. Emily Conant, of the psychological department, were among the first to make use of child study in the training of teachers, and today are among the firmest advocates of such training. Several normal principals used these words in speaking of the benefits from child study in their schools: "It has helped to put students in sympathy with children; has enabled them to see mind unity as unfolded in childhood; to make psychology a living subject."

The methods are many and varied, ranging from the miscellaneous written collections without any hypothesis to investigation along definite lines. Methods, however, are always of less importance than the interest, sympathy, intelligence, persistence, which the teacher brings to the work. Miss Sutherland, of the Columbus Normal, sums up her work in these words: "My plan is rather to create a living interest in the individual child than to lead any young people to imagine they are doing 'original work,' or making any very valuable scientific generalizations." President Seerley, of Cedar Falls, is evidently of the same mind: "Our purpose is more to interest teachers in children than to make any contributions to child-study literature."

The child-study work carried on in thirteen different institutions is in accord with these lines marked out by Dr. Boyden, of Bridgewater: "Our course includes the usual lines of physical, intellectual, and moral phases of child life; tests for physical characteristics and weaknesses; means of correcting evils so far as they lie within the teacher's control; studies of peculiar children and means employed in teaching them; the study of a class of children as a preparation for teaching them; studies of stages of child development from the kindergarten upward; study of the literature of the subject, and investigation along certain practical lines."

In the Providence, Fitchburg, and Westfield normal schools each student in the normal department and each pupil in the practice school undergoes an examination in the psychological laboratory in reference to his sense organs and motor powers; and all serious defects observed in regard to children are reported to the parents. During the past year Miss Hunt, of Providence, Mr. Kirkpatrick, of Fitchburg, and Mr. Monroe, of Westfield, have issued various studies along the lines of the child's physical and mental development which have formed the basis for much of their work in child study.

Our own practice school being located in a manufacturing city, we find that in many homes both father and mother begin work in the mills at 6 o'clock in the morning, and do not return until 6 at night. Seventy per cent. of the children in the grammar school must be excused at 11:15 to prepare and carry dinners to their parents and other relatives. Fifty per cent. of our entire number are orphans or half-orphans. Many girls of twelve and thirteen have the entire responsibility of preparing food for, and taking care of, a family of small children. Several of our training teachers, especially fitted for this work, have been of real service to these little mothers, and even to mothers of older years, by teaching them the principles of cleanliness and of ventilation, how to wash garments with the least expenditure of time and energy, how to bake bread, how to cut out and make clothing. "Man is what he eats and what he does with it," says Dr. Hall. I am convinced that six cases of poor eyesight in our practice school were brought on by lack of proper food. Dr. Fitz, of

Harvard, tells us that defective hearing may often be traced to defective sight, and defective sight back to malnutrition.

May I say here that the tests we have made for sight and hearing, and examinations made of teeth and, in several cases, throat, nostrils, skin, and scalp, and measurements of chest expansion, have been of much practical value? It is of little use for teachers to diagnose children, unless remedies can be applied for defects; and I hesitate to say to a boy, "It is wrong for you to go into the saloons, to sell papers, to black boots, to clean up the floor at 12 o'clock at night," unless I can tell him where to go and what to do to earn money to buy his breakfast. We have tried to ascertain the line of the children's interest in reading, to direct such interests along safe lines, to find out their sources of amusement, and to provide innocent recreation and good companions; and, above everything else, to learn at what shrine of human character our boys and girls are worshiping.

The chief business of the professional school is to train the student to translate herself into her pupil's environment; to put herself at his exact stage of development, so that she may be able to think with his mind and experience the embarrassments under which his struggling brain labors, and view her own tuitional approaches to him thru his eyes. But to put yourself in his place, scientifically, sympathetically, and habitually, is the simplest, hardest, and most important lesson that a professional school has to teach or an intending teacher to learn.

I have found that actual experience in organizing, teaching, and governing a room of children, and child study, as we understand it today, have contributed more than anything else toward this end. It is during the period when they are in charge of a room that our teachers become vitally interested in the ambitions and interests of children. The final test of a teacher's power is her ability to govern a school, to get into sympathy with the children, to get a strong hold of their inner life, and to strengthen their moral character.

The power in the actor or public speaker which holds his audience is the power used by the teacher in controlling a class of children thru the force of her personality, and I have never yet had a pupil who could read or recite with dramatic effect who failed to govern children easily and well. The public speaker must train himself to judge of the feelings of his audience by the attitude and varying emotions depicted on the faces of the people who are before him. The teacher should also be able to judge emotion thru expression.

A short time ago I gave the pupils of our training school a character sketch—the story of a little newsboy's love and care for a younger brother. For one month they studied the newsboys in our practice school, their life on the street, the advantages and disadvantages of their home life, their facial expression, intonation of voice, mental and moral

characteristics, honesty of purpose. They also studied a boy of fourteen who helped support an invalid mother and a little sister. This increased interest in the poor little fellows bound them more closely to the school; it awakened the teachers' sympathy, and their impersonation of the character served ever afterward to guide them in their understanding of child nature.

Whenever it is practicable in our school work, expression should always follow impression, and the above method of child study tends to develop the motor, as well as the sensory, side of the human being. The training which comes from the impersonation of various characters is of immense advantage to the teacher, who must live, to some extent, the life of some thirty or forty children every day she is in the schoolroom. Mr. Street, of Clark University, in his valuable paper on "Suggestion" tells us that there is much ground for urging a fuller and higher use of the dramatic instinct in teaching. In the studies made of the spontaneous school-yard plays of young children we find that the dramatic and representative plays — those having the greatest physical action — are predominant.

Twenty-two professional schools are making investigations along lines of various methods of rest and recuperation; proper use of play instinct and motor activity; children's interests; proper arrangement of program and courses of study. Child study, physiology, biology, and physiological psychology have contributed more new truths bearing directly on education during the last twenty-five years than were discovered during the preceding two hundred. I quote from Dr. Minot, of Harvard: "Certain it is that the idea of the difference between the brain of the child and that of the adult is steadily spreading, and this appreciation of the difference is growing, not alone year by year, but month by month." We have learned that each organ has its nascent period, and when these periods are definitely settled we shall have some basis for our work in physical and manual training. We have learned something of the nascent periods of mental processes, enough to give us reason to believe that their final discovery will be a great step in school economy; for we shall then know when to teach certain subjects and methods. We have learned that the brain acts not as a whole, but that different portions have different functions; that we have not "a memory," but "memories;" not "an imagination," but "imaginations;" that each memory and each imagination, as each sense, must be trained by specific means, and that there is no one study whose main function it is to train the memory or imagination. We have learned that some children are eye-minded, some ear-minded, some motor-minded, and that all children should be approached thru the lines of the least resistance.

The truth has been brought home to us as never before that obstinacy and dullness are often due to physical, rather than to mental or moral,

defects; that the child needs strong nerves, tough muscles, good motor centers, good eyes; that there should be a weeding of certain defectives who aspire to be teachers; that the teacher who lacks health lacks vigor, and consequently lowers the vitality of every pupil in the school; that what a teacher is rather than what she says leaves a permanent influence upon the children.

Many of our erroneous notions in regard to children have been due to the old idea of a world finished in six days, not to the newer idea of a world still in the process of creation — going to be created as was Adam in the old mediæval play. One of our chief reasons for not understanding children is doubtless due to the fact that our experiences of impulses, fears, likes, dislikes, inherited from an animal and savage ancestry, pass out of clear consciousness so early that we forget that we ever had them. We are beginning to understand that in every mind there are unknown possibilities, and that it is our duty to find out and develop what lies in embryo.

All the more scientific study of children serves to impress strongly the truth that the human mind is not a symmetrical thing; that even superior minds are poorly endowed in some respects while richly endowed in others. The traditional theory of education which aims at "harmonious development" is one which must be materially modified, if harmonious development means symmetrical development. In the future we shall aim rather to educate children along the lines of their greatest strength in a broad way. As teachers in professional schools we should know of the latest researches, and the work in the practice school should keep in touch with these investigations. Dr. Bolton, of the Milwaukee Normal School, seems to be particularly successful in joining the new to the old. Dr. Snyder, of the Colorado Normal, writes: "We have been doing considerable along the line of physical stress at certain periods in the child's development. The practical outcome of this study is the letting up on mental requirements when the powers of life were going to develop some particular physical center. The adolescent is one of these. As the periods correspond to the seasons, these are shorter, but are recurrent. Another practical outcome is the belief that the school day at certain times of the year should be longer, and the school year also longer."

I often wish we might go back to the days of the old Greeks, when the scholar was an idler, one who had leisure to walk among the olive groves, to let his eye rest upon the purple hills and the blue sea sprinkled with green isles, to read the lesson the fair earth teaches more than that impressed on parchment. The eyes of the teacher as well as those of the pupil need to be opened to the near marvel and the besetting glory, even as were Henry Thoreau's when God met him on Waldon Pond, and his eye discovered more of the divine and beautiful in the woods of Concord, along the banks of Cape Cod, in the Maine forests, than most travelers

see on the Rhine or amid the Alps. All children have a right to pure air, to sunshine; and if they must be sent to school while they are yet babes, they should spend the spring and autumn months in the open air in direct contact with nature.

When I hear lisping toddlers questioning, "Mamma, will I pass?" and see the early rush of children into so-called "society ways," the formal parties, the late hours, the premature accomplishments, so desirable at thirty, so alarming at thirteen, I tremble sometimes lest childhood become a lost art, and babes be robbed of the most important period of development — the productive, unconscious growth of earlier years.

John Fiske has shown that the higher development of man and society depends on the prolongation of infancy. Multiply the years of receptivity, increase the period of plasticity, and you enlarge the outcome of that life; you increase the variations from the original type; you emphasize its individuality. Professor Minot, of Harvard, states that the main trouble with the students who come to him year after year from the schools is that most of them lack all training in the power of personal observation and deduction. Professor Tyler, of Amherst, when asked what he found to be the greatest lack in students at college, replied: "They are as blind as bats, and have no imagination."

There can be no doubt that child study is slowly opening the eyes of many teachers. It is to be hoped that it will stimulate originality of thought and enable pupil teachers to become real student teachers; that it will put their minds into a condition to act independently, so that they will become authorities, not echoes. True scientific study inspires humility, a sympathetic spirit of open-mindedness and investigation; and surely no other body of people has greater need of liberality in thought than we who are teachers. I welcome anything which will assist in training my students to do independent work. Nine-tenths of the pupils in our New England professional schools for teachers are women, and heredity has so closely tied us down to allowing others to think for us and direct our lives that we need to be set adrift, with now and then a word to strengthen and encourage. Dr. Hughes has well said: "The best work one soul can do for another is to make it conscious of new and greater power. Lack of true consciousness of power is the greatest cause of human weakness. More failures to accomplish the grandest results in life come from a depressing lack of self-faith than from any other cause."

There is something wrong in youth when it does not want to strike out in new lines, and woe unto those people of older years who are forever crying, "Halt!"

THE ADOLESCENT AT HOME AND IN SCHOOL

BY E. G. LANCASTER, COLORADO SPRINGS COLLEGE, COLORADO

The mental life of the adolescent is as distinct from the mental life of the child or adult as botany is distinct from chemistry or geology.

This paper must assume that the recent studies of the adolescent period have been read by this audience.

Adolescence begins when the primary, unthinking life of the senses of the child opens up into the broad, secondary mental life of meditation, reflection, and construction. Neurologically adolescence means the maturing of the intermediary nerve centers, in distinction from the primary motor-sensory areas. Objects and events are seen in their intimate relations for the first time. The one feature, however, which I wish to emphasize is the emotional enthusiasm of the period. For the home and school this feature must be understood, or the life will be injured. Emotion seems to spring forth full-armed. Individuality is felt in its fullness for the first time. Personality enlarges. The child rapidly comes into the full human inheritance.

In ideals the child lives the life of a great poet, artist, scholar, or statesman. The grandest levels of life are reached. Time and all obstacles are overcome while the ideal life is made a real experience. Said an ox-eyed, cherubic little academy girl of fifteen to me recently as we wheeled along the busy street: "Oh, my music is the one thing I enjoy. I am a dull scholar, but I have one thing I want to do in life. Before my life ends I mean to compose one piece which shall make life richer for all time. It must begin, oh, so —" (and she raised one hand as if to touch the keys very softly), "and end in one grand, triumphant chord."

Adolescence is the critical, the tragic age. The family life may be destroyed or the child ruined by failure to understand the stirrings of the new life now forced upon the child by the rapidly increasing blood pressure and the maturing brain centers and the development of sex.

Adolescent psychology does not depend upon sex development, however. It may precede or follow puberty by ten years or more. Critical circumstances may mature the brain centers at a very early age, or their development may be delayed for some cause till twenty-five, while the sex functions, which are controlled more by the spinal cord, may develop even when the brain is dwarfed. This fact is well substantiated by the study of idiots.

Every boy or girl passes thru these adolescent stages. Unless the vitality is sapped by overwork or bad habits, or unless the brain potentiality is very low, the distinct adolescent mental traits are prominent. From one case we may learn all.

Here is a condensed letter from a prominent educator:

My adolescent period shows distinct phases. First came love of emotion. I read the New York *Ledger* on the sly. Sylvanus Cobb was my ideal. My mind was full of adventure and excitement. Dreamed of innumerable underground passages and imprisoned beauties, whom I released. Was a great rescuer. The wildest kind of romance filled my mind. I wrote a story in red ink, which I never read. A girl read it and called it magnificent. After that I wrote for her many bits of romance. The fever for that thing was very intense. I idealized several girls at my school, and in my imagination was very gallant, but all the time was so bashful that I never dared to speak to one of them.

Second phase was my hunting and fishing craze. After much pleading, father bought a gun. Spent every minute I could get with it. Would get a stent on the farm and hurry through it and hunt. Blazed away at everything. Was going to kill everything alive. Would snap at a hawk a mile off, and kill him in imagination. Collected a fiddlebox full of wings and skins. Red squirrels, chipmunks, etc., contributed their skins. Had an exhibition in a barn. Put up all the partridges' tails and other things. All this time read everything on sport and adventure and romance.

Next was music. Father wanted me to learn. I hated it. Suddenly at thirteen to fourteen came a great liking for music. I would be a musician anyway. Parents protested. Did not like the profession. I was determined. Got a piano. Went at it furiously. Wrote music and copied stacks of it. Made a list (200–300) of tunes I could play. Would imagine a scene. A crowded hall. I played and swayed and swung my head, and the people applauded. The assembly was charmed. All the time it was a little ditty and a common player. This is still a relic in my life. I now daze audiences in church and other places with my imaginary music. Hypnotize the world.

Then came oratory. I was aglow with enthusiasm. Webster to Hayne, "Thanatopsis," Byron's "Darkness," Patrick Henry, and, best of all, "The Maniac." I used to declaim it with a flaming red necktie. It was all terribly realistic.

Then the girl fever. There were two or three who were my ideals at different times. The first was five years older. I would have eaten dirt for that girl for a year or two She never mistrusted it. Never dared speak to her. Then another nearer my own age. Spoke to her, and became an object of school jokes. She is still thought of with a peculiar feeling.

Nothing is more intense and vivid than my plans for the future. One scene: A high hill with a bald summit. Had been blamed for something and went to that peak. Alone there I had a very deep and never-to-be-forgotten experience. Paced back and forth and said: "Now, I will, I *will* make people like me, and I *will* do something in the world." I called everything to witness my vow: "I'll never visit this spot till this is fulfilled." Once a party went there years later, but I made excuse for not going to the same spot.

The home problem of the adolescent cannot be solved until a thoro knowledge of the period has been gained. The matter of discipline is of first importance. The tight lines of childhood must be relaxed. How absurd to command President Lincoln to wash and comb his hair, or to retire at 9 o'clock. The Lincoln in ideal suffers a like indignity. If the discipline in early years has been good, the command may safely give way at adolescence to the ideal. If the early training has been bad, the command is useless now.

At no time in life will a human being respond so heartily, if treated by older and wiser people as if they were equal or even superiors. To

attempt to treat a child at adolescence as you would treat an inferior is instantly fatal to good discipline. Real life is the best teacher.

Here is a case: A father brought his son into the military school where I was teaching a few years ago. He said the boy had outgrown parental discipline, and he wanted to "rein him in a little." The boy was over six feet in height, and weighed 196 pounds. His bearing was magnificent, his eye clear and large. It was my pleasure to walk and hunt often with the boy. His love for and knowledge of nature were remarkable. His Christian life was rich and full. He became the school idol.

There sometimes came into his eye a far-away look, but no murmur. The discipline was petty—red-tape of the narrowest kind. Thirteen times a day this great fellow must toe the mark and answer roll-call. He must hold his hands to an inferior boy, who inspected them to see if they were washed properly before meals. Sent to the city on an errand, the boy forged checks to the amount of $250, passed them, bought a lot of pistols, bowie knives, and sporting goods, and started for the West. His father was broken-hearted. His mother became insane at the loss of her boy and the death of her only other child. The home destroyed, the boy lost. Why? The father, a small, shriveled man, was busy with his wealth, growing narrow and prosy. The boy, with the enormous blood pressure pumping life energy thru his veins, was just about, in his own imagination, to step before the world as a magnificent statesman and orator. The father still thought of the boy as a mere child, and did not realize the life that thrilled him. He tightened rein when he should have turned the boy loose. To try to suppress the output of vital energy in the boy at that age is to sit on the safety valve. Someone will suffer. Unfortunately it is usually the boy. Discouraged, he turns to gratification of the body; or, in the deep moments of despondency, so frequent at fifteen to nineteen, he commits suicide. Keep a record but for one year of the reports of young people who take their own life. It is shocking. There come moments of gloom that are clearly pathological in extent, but due to the rapid growth and changing functions of brain and body. Genuine sympathy is a godsend to the boy or girl at this time.

The teacher of pupils whose ages range from twelve to eighteen, who tries the machine kind of discipline, may grind out order, but he murders the budding life of his students, whom he is hired to assist into full manhood.

A difficult feature for the parents is the natural longing to get out into the world, to see beyond the horizon which has limited the life. Said one girl: "I have the best of homes, yet I sometimes feel as if I should go crazy if I must remain there. A long drive out into the country, or a week's visit, satisfies the feeling, and I return thankful for my dear parents and the love and quiet of home."

The rapid growth calls for excellent nutrition. Appetite changes rapidly, showing that the system demands new materials as food. Starvation may ripen, but it dwarfs. Feed the adolescent.

Parents are often shocked at the lack of respect suddenly shown by the child. The parents have ceased to be the ideals. A higher ideal has been conceived by the child. Or the child, with Tolstoi and many others who might be cited, has discovered that his parents are not his parents at all. A college professor said to me: "I awoke suddenly one day to the fact that my father was no relation to me. After deliberation I went and told him my discovery, and asked for $6 and a gun that I might go to California to seek my fortune. Father took me to the barn and gave me a sound thrashing, and I never again for a moment doubted that he was my father." Such cases are surprisingly common. At home the child needs to be treated as an equal, to be taken into the family counsels, to find his parents interested in all that interests him. A true sympathy between boy or girl and parents is the ideal good for the child. Home should nourish, rest, and sympathize with the adolescent.

School must develop the mind and body. Before we can train the mind of the child it ought to be obvious that we must understand the psychology of the age which we are training. Epochs count for much at any time, never as at adolescence. Such interests as have been cited above must be handled with care.

Felix Adler says that we should have special high schools for those special interests. He could not say that and know much of adolescent psychology. Seldom does the mind unfold equally in all directions. One year it is interest in art, another in music, another in literature or language, and so on. Because a child is white-hot after music this year, it is no sign he is to be a musician. It means that his musical center is functioning, and, the rest of his nature not being complete, he goes in an eccentric path. Make the most of each interest, but keep up general culture. To specialize there might hit the vital center of the life to be and develop it at the best, but the chances are very, very great that it would prove fatal to the individual by trying to make an artist or musician of one born for something else.

While the pupils are at this plastic age the opportunity of the teacher is almost infinite. The teacher who can see into the mind of the pupil, find the growing center, and apply the stimulus at the right time and place is a person who has almost the power of creation.

For the adolescent, school may be anything but dull and be pardoned. Dullness, stupidity, lack of life and school enthusiasm are absolutely unpardonable. A new theory, from our common source of inspiration, was given to us recently when Dr. Hall advocated fighting. Fighting is infinitely better than the loss of energy from immoral practices. They are not found together. The boy must have excitement. Keep him

strong and pure by expending his surplus energy in worthy activities. Playing "thumbs up" or marbles is not sufficient for the adolescent. I am inclined to think that football as it is played is quite sufficient, and that fighting, if necessary, might be for points under the rules of the Lennox Club. Athletic sports are the divine right of a boy. The schools of England, like Eton and Rugby, have made men as no other schools have done. Fighting and athletic sports have done much to produce Wellington and Gladstone. Our high schools are too tame. We need to introduce heroic athletics and make every possible effort to draw every child into play.

Another question must be settled: How much work may we safely allow the rapidly growing pupil to do? Having collected facts on this subject for three years, tho not ready for a final statement, I am quite convinced that sharp, but not prolonged work, both physical and mental, is best for the adolescent. Our school periods are too long to hold sharp attention, and intense effort can be maintained only for a few minutes. Complete rest must follow.

We must remember that growth is the object to be attained, and anything which interrupts growth is injurious, no matter what it is. Adolescence is not a time to acquire skill, but to develop the fundamentals of all departments of mental and physical life. Skill is used here in the sense of a specialty.

In school, as in the home, discipline must be sympathetic and free from all mechanical devices. The adolescent interests are usually the key which opens the way to the solution of all problems of discipline. Interest in nature leads all others, yet nature study in our schools does not meet the needs.

Of all pedagogic ossuaries our nature work is the dryest. Froebel said that nature, being simple, educated the child. In all of man's history till recent times nature has been his only teacher. Nature and the mind of the child are a mutual fit, because developed together. To take a child away from nature and give him a text-book on nature is not only to miss the entire value of nature work, but is such a stupid performance that it should not be discussed in a teachers' association. Nature, by direct contact, goes to the heart of the child, heals every sorrow, inspires to sublimest thoughts and activities, and gives strength and courage, and calls forth and matures the best endowments of the human soul.

CHILDREN'S INTERESTS IN LITERATURE

BY ISABEL LAWRENCE, STATE NORMAL SCHOOL, ST. CLOUD, MINN.

Artists would fain have us believe that æsthetic tastes are somewhat accidental structures. Could we take the taste for literature in a cultured brain, and remove the last straw blown to it, and the next to the last, and so on to the very center of the complex and compact accretion of years, we should find, at the beginning, native interests. Instinctive tendencies have originally determined the structure; native interests have enabled the first straws to stick. The question, then, which is being asked on every side, "What material shall we select to build the taste for literature in children and in the popular mind?" cannot be answered until after the solution of that other problem of children's spontaneous interests. It matters not what you supply for children or communities to read, if they won't read it; it matters not what you compel them to read, if it does not stick.

Instinctive interests are the inheritance of the past, and evolve in the child according to a pre-established law written in his nervous system. They must be found in every normal child, for they are racial rather than individual. They are spontaneous; education must wait upon them. They should be allowed healthy development, with little conscious interference in very early years; later, when the nucleus is large enough, education has its opportunity; but if the early development is faulty, education can do little to repair the mischief. There is no chance for the material to stick.

What are the universal and fundamental interests in literature, and how do they change in the growing girl and growing boy? This child-study problem is practically unsolved as yet, and there is much fumbling in deciding on the right method of research.

Some studies have sought from the children themselves the list of books they have read and their own ideas of what has interested them. Two typical cases taken from such a study in a large city may be found suggestive:

One second grade, ages from seven to ten, handed in very neat papers, telling what they had read and commenting on their favorite books. Many of the lists would do credit to a high-school grade. There is great unanimity of opinion. The description of dawn by Frank Dempster Sherman is "perfectly beautiful." These children "love everything Mr. Longfellow or Mr. Whittier ever wrote," but the "Children's Hour" and the "Psalm of Life" are the "loveliest" of Longfellow's, while "My Psalm" of Whittier is pronounced "exquisite" by three little girls of eight or nine years' experience in this life.

Sister Mary's little flock of corresponding ages at the parochial school in the same city, a grade largely composed of boys who on the street defy both the policemen and the curfew, were corralled and made to write answers to the same questions. According to some remarkably spelled papers, these little street boys are consumed with love for the catechism, the lives of the saints, and Bible history. Says one sturdy little fellow of nine: "I lik my prar book best. In the prar book are nice prayers. I ofen pray into my prar book. Prar books are verry nise for to pray in. I like prar books. I do car verry much about my prar book. I read my prar book once threw allready."

These children name first, second, and third readers with an occasional "rithmetic" or "gography" as their list of books read.

What can be gotten out of such a study? These papers photograph the family, school, or public library, for children must read what they can get. Children, too, are not above making grown-up opinions their own, if they can remember them. Aren't they marked down if they don't do this in every other school exercise? To be sure, the teacher may have explained the freedom of *this* composition, but that makes it all the more suspicious. The children enter upon the work with anxious foreboding. What might happen to a boy who confessed that he adored Buffalo Bill? "It's a trap most likely!" So these studies betray the work of the teacher rather than the tastes of the children. Can't you see the charming teacher of that second grade? Can't you hear her talking of "lovely" and "exquisite" and "perfectly beautiful" poems, while the little people before her are entirely occupied with her smiles, her graces, and her emphasis? These studies have great local value both to the teacher and the superintendent, but what light do they throw on the spontaneous interests of all children in literature? Very little, and that little can be read only by one who knows those interests beforehand. It is true that some of the most valuable contributions yet made to this subject have been studies of this sort; but their authors have possessed an extensive knowledge of children's interests, and insight and discrimination enough to avoid the dangers of a very imperfect method.

Reminiscent studies, including autobiographies, can throw light on certain phases of this subject, tho, aside from the danger of deceptive memories, they too must chiefly reflect environment and adult influence. Examine the list of books read before ten by John Stuart Mill.

The plan suggested in the treatment of the story of Charlemagne in Mrs. Barnes' *Studies in Historical Method* is an application of the method of difference to the problem. The story of *Ivanhoe* was told in this way to an assembly of children from five to fifteen, and reproduced three weeks later. As the children remembered only what interested them, the varying tastes at different periods of development were clearly indicated.

Miss Countryman, of the public library of Minneapolis, is making a

study of books spontaneously selected by children — a study which lacks many of the drawbacks of the teacher's study, as the librarian finds the children off guard. An instance of the value of this method is found in her discovery that the children of Minneapolis do not spontaneously choose nature books, however charmingly written or illustrated. They select them only when suggested in lists given by teachers.

Every method of direct study of children's interests in literature may be helpful, if pursued with due caution and a critical sense of the defects of the instrument. But literature is, after all, only a mode of expression of life. The native interests which underlie a taste for literature are interests in life itself, and they are manifested in many other forms. Studies of children's actions, of their plays, their drawings, their ideals, and their emotions reveal the same nuclei. Very many of the characteristic interests of children have been discovered by inductive studies on some one of these subjects and verified again and again by other independent studies. Such known interests form a very solid and important basis for the study of children's tastes in literature. It only remains to select the best books to fit such native interests, and then verify the solution by an inductive study of its effects. First attempts must necessarily be very defective, but a brief survey of the field from this standpoint may serve to illustrate a method which, carried out scientifically and exhaustively, must lead to some certainty of result.

Literature realizes ideals for us. A little child before eight, in his ignorance of natural law, is forever trying the impossible, and being baffled and hurt in consequence. How delightful, then, to be the giant in the story, to knock stars out of the sky with your head, to walk with seven-league boots and actually seize the pot of gold at the end of the rainbow! The child suffers from instinctive fears, and every fear means a possible interest in the literature which can both exercise and allay it. The little mortal who trembles at the sight of a big dog, and hides under the bed clothes to escape the frightful monsters of the dark, glows with a sense of conquest when your story enables him to slay lions and tigers with Hercules, and face with sublime courage fearful dragons and fire-spouting chimeras. Thus myth and fairy tale satisfy the child as they have satisfied primitive man.

The instinct of trust is strong now. Every mind-picture is real to a little child. He fails to discriminate between images made with the help of the senses and those furnished him by the story. The most vivid image is the truest; so he wakes up to this life slowly after the tale is told. Do you not remember that you yourself could not tell whether it was morning, or noon, or night when you got back? It is this power to be another, to live elsewhere than here and now, which develops into breadth of vision and power of every sort hereafter. Starve this instinct now, and man is forever doomed to live within narrow ranges. Its present

food is fancy. If the child does not enter the realm of literature thru the time-honored gateway of fancy, there is danger that he may never find any other entrance. The gate is widest under the magical sunrise sky of childhood. Later the door is shut, and he who climbs in by some other way must miss forever the beauty reflected from the orient.

The child before eight has a strong instinctive interest in rhythm, whether of movement or sound. He is akin to primitive man, and, like him, makes words of natural sounds. To these children Hiawatha sings like the forest, and the refrains of the ballad sink deep into the soul and cultivate the ear for music and poetry. Sir Walter Scott at three shouting old English ballads from Percy's *Reliques* is an example of the spontaneous taste and of the effect of its gratification.

Children at this age care most for motor images, and as the image tends to react in movement, the dramatic instinct is strong. Test the literature selected. If 95 per cent. of the sentences can be acted out, or represented in striking pictures, it is safe. Sentences which explain and comment are a dreary waste. Homer and Æsop, ballads and story poems, "Barbara Frietchie," "The Pied Piper," and the "Jackdaw of Rheims" will stand the test.

Few poets sing the real emotions of children. Jean Ingelow in "Seven Times One," Riley sometimes, and Stevenson almost always are real child interpreters. Grown-ups often make the mistake of selecting anything with a title referring to children as fitted for children to read — a mistake eloquent of the superficial way in which this subject has been handled. This has kept the "Children's Hour" in the list for little folks to repeat, tho the only stanza intelligible to them describes the storming of the study by "grave Alice and laughing Allegra and Edith with golden hair." The rest, like "Little Boy Blue" and many of Field's most beautiful child poems, is utterly incomprehensible to the child because full of the emotions of the parent. "The Barefoot Boy" of Whittier is the meditation of a grown-up, blasé man of the city. What unmitigated nonsense it must seem to the barefoot boy himself! "Little Annie's Ramble" by Hawthorne is often given to children to read when no one but a veritable grandsire, and he of Hawthorne Puritan type, could look at life from such a standpoint. When shall we learn that before eight there is no instinctive interest of children to fasten any reflection upon?

The animistic tendency which makes the little child attribute his own feelings to things around him interests him especially in growing things — flowers and animals. The boy and the dog mutually understand each other. They roll over in the dirt with exactly the same impulse. No grown-up need expect to enter the charmed circle. The child is nearer to the animal, and he proves his kinship by his interests. From this educators have concluded that the child cares how many legs the wasp has, and longs for precise knowledge of the construction of the cat's eye

or the dog's feet. This proves an entire mistake. These are analytical, grown-up interests, and have long made dull and stupid school hours for our children. The instinctive interest in animals is social. It is one of companionship. Those books only which write sympathetically of the animal's soul-life—the *Jungle Book*, *Wild Animals I have Known*, *Black Beauty*, *Beautiful Joe*, or *Water Babies*—really appeal to children. Great is the disdain for the improving nature reader.

There is an "uncomfortable predilection in the child mind for very synthetic theology." The pleasure taken in allegories indicates that little children's sermons should be parables with no unsought explanations.

In the world's history an age of faith is followed by an age of doubt; so the child who has reveled in myth and fairy tale suddenly at eight or nine begins to inform you that the story is not true. We are all unnecessarily angry at errors from which we have just recovered, so our little skeptic criticises more severely than is quite consistent with his evident desire to be around while you tell those stories to younger children. Do not be deceived. He is simply trying to assert the possession of a new power of criticism, and will be as delighted with your fairy tale as ever, if it is distinctly understood that he does not believe a word of it. Still, this new development of interest in whether stories are true or false demands recognition. It marks the transition of the child into that least-understood period of child development, from eight to twelve or thirteen.

There is a demand now for the history story—Greek and Roman history, and the periods of chivalry and modern adventure, where the interest centers upon individuals.

Fighting is an instinct now. The small boy who has hitherto cared little for books is fascinated by tales of battle. A sturdy little friend of mine, ten years old, whom his little playmates admiringly describe as hard, sat up reading Howard Pyle's *Robin Hood* long after bed time the other night, very much to the surprise of his family. "I don't think that book is very interesting," said his mother. "O 'tis; Robin Hood just killed a man!" A book like Stevenson's *Black Arrow* can do wonders toward transforming the brutal form of this instinct into the higher forms of courage. Other literature which serves this purpose may be found in Howard Pyle's *Otto of the Silver Hand* and *Men of Iron*, Gilliat's *Forest Outlaws*, *Horatius at the Bridge*, *Days of Bruce*, and *Hero Stories of American History* by Roosevelt and Lodge. In fact, an embarrassing wealth of good literature appeals to this interest, as well as countless bad books and worthless juveniles. Lazy parents and moral teachers, seeing the evil, often condemn all such literature, both good and bad, thus missing one of the strongest moral influences over boys of this age.

"I like that book," says a nine-year-old, "because it tells about mummies and how they bundle them up." This interest in details and in descriptions appealing to the senses should be utilized in the reading of

books of travel and stories of industries as well as in history. This is, indeed, a most matter-of-fact age. The sentimental gets no genuine response.

"Whether we look or whether we listen,
We hear life murmur or see it glisten,"

recites the teacher with appreciation. Lack of attention is evident in the fourth grade. Something must be done. Incautiously the teacher asks ten-year-old John to tell what we hear murmuring on a beautiful June day. "Skeeters, getting ready to bite yer," is the instant response. "The *Iliad*," says Sydney Smith, "would never have come down to these times if Agamemnon had given Achilles a box on the ear." Certainly Lowell is no more in that fourth grade for that day. There would have been no difficulty, had the teacher, consulting the children's tastes instead of her own, omitted the description of June and begun with—

"The drawbridge dropped with a surly clang,
And through the dark arch a charger sprang."

Early adolescence, from twelve or fourteen to sixteen, produces violent changes in instinctive interests. Emotions develop rapidly in this storm-and-stress period, and literature as the expression of emotion becomes of immense importance. A volume could not discuss adequately all of these new-born instincts in their relation to literature. The new love of nature and art, the sudden religious doubt, and the alternating fits of depression and elation, selfishness and altruism, find gratification in poetry, romance, and books of religious aspiration.

Suddenly forced out of an attitude in which he has considered himself objectively, the young soul is shocked and disturbed at what he feels. The tumult cannot be quelled until he finds himself. He is too sensitive to confide in people at this time; so he reads hungrily. He is impatient of details, because every book has a message for him — too great for him to linger over form or dimly understood sentences. The whole universe and all past time must be searched before he will have time to study carefully and closely. His ideals, his plans for the future, are formed and abandoned daily. He must know what everyone else has done. He must live in all sorts and conditions of life. With suddenly developed energy and enthusiasm, he seeks out all heroes and throws himself at their feet. If the wrong books are near at hand, he will be Fitzsimmons, a cowboy, or some brilliant detective. If the right books are there, he will change his ideal from physical to moral and mental courage, but he still must conquer. A narrow range of ideals now means a narrow range of thought and life hereafter. Lack of extensive reading means lack of ideals. The cribbed, confined reading of one good book until he understands it means narrowness of thought forever.

This is the time when ye pedagog often stands directly in the way of instincts he little appreciates. No one is so sought for, to teach the early

adolescent pupil in seventh and eighth grades, as the thoro teacher, one who can hold the pupil down to a steady grind upon details. You know how the boy is often driven from school, but the loss to the taste for literature in those who stay is not so often appreciated. No writer can compare with Sir Walter Scott in presenting just the romantic qualities suited to the taste of the adolescent. But the *Talisman* studied faithfully to the last allusion, with long columns of words to be searched for in the dictionary, daily, for an entire year in the eighth grade! How they hated it! Because Milton's *Paradise Lost* cannot be exhausted in two years' study is no reason for assigning it for two years in the grades. The seventh- and eighth-grade student should read many times as many books as the university student, because the close logical, analytical study which should follow in later adolescence is absolutely dependent for its quality on the breadth and extent of the reading which precedes it.

The development of the social instincts, the interest in the other sex, a strong, overloaded passion of human nature, should not be overlooked in the use of literature. In proportion as enthusiastic literary interests are formed is this tendency kept from becoming precocious and dangerous. Again, the knowledge of the passions of the great world without comes to the child thru concrete images. His own environment may not furnish noble ideals of love and marriage. Just here it is important that fiction — *Evangeline*, *Hypatia*, *Ivanhoe*, *The Story of Jean Valjean* as edited by Miss Wiltse, *Tale of Two Cities*, and many other novels of value — should be added to his reading, and added early, that the new meanings of things may dawn upon him first thru the pure and noble ideals of the best literature. These are the days when a morbid conscience and mawkish sentiment are to be guarded against. A word of warning in regard to stories and novels of the type of the "Elsie Books" and E. P. Roe's works. They are as common in our Sunday school and public libraries as poison ivy in the woods of Minnesota. The cowboy novel and the detective story are not half so destructive to healthy morality.

These books are not literature. After all, real literature is fairly safe in the hands of any child. Debarring a few books of perverted genius, and some earlier classics which belong only in the library of the literary specialist, a family or public library containing nothing but really good literature should be open to the adolescent to browse where he will. The Head was right when he gave Beetle the run of his library of fine old English classics, "prohibiting nothing and recommending nothing." He was right, too, in his method of happening in occasionally, to read a verse or two from this or that author, "opening up avenues."

In later adolescence severe logical study should take the place of browsing. This is the reaping time. If in early years natural interests have been seized at the right time, not the few but the many may take

possession of their rightful heritage in the noblest thought of the ages. Even "the man with the hoe" may have that priceless and surprisingly rare gift of the gods — a taste for good literature.

A CURRICULUM OF APPLIED CHILD STUDY FOR THE KINDERGARTEN AND THE PRIMARY SCHOOL

BY FREDERIC BURK, PRESIDENT STATE NORMAL SCHOOL, SAN FRANCISCO, CAL.

Lloyd Morgan has pointed out, with some effective force and clearness, that the mental process by which we discover a truth for the first time is not the identical process, necessarily, by which we prove a truth logically. It is one thing to *see* that the shortest distance between two points is a straight line, but quite another process of mind to prove the same thing logically; it is one thing to *know* that water will flow down hill, but quite another thing to prove it as a truth of physics.

The distinction between the order of logical proof and the order of first discovery is clearly a vital one for pedagogy. As a rule, in our current theories the pedagogical process is woefully confused with the logical method of proof, and we are persistently forcing upon the child the method of proof when he needs the method of discovery. Our dogmas of the formal steps are principles of logic; no one has yet clearly written down the pedagogical steps. Practical experience, in a dumb, unconscious sort of way, has ever struggled against the current of this unfortunate confusion in education, and has repeatedly shown that with children certain very illogical methods have produced more successful results than the logical methods. Let us take, for example, the method of teaching a child to read. The letter is clearly the logical simple. It is the fundamental brick out of which the complex structure of written language is built, and it seemed reasonable beyond question fifty years ago that the pupil should begin with this ultimate element, combine it to form syllables, combine syllables to form words, words to form sentences, and sentences to make sense. Horny-handed experience, despite the clearness of argumentative support, however, has swept all of this beautiful methodology of logic out of the back door, and the very name of the "a, b, ab" method in reading has become a byword and a reproach.

The same seemingly paradoxical results have been shown by experience in the methods of teaching the grammatical use of language. As an argument, the theory cannot be met that before a person can use language correctly he must begin with the simples of grammatical structure — with the parts of speech, then the paradigms and conjugations, and

finally combining these into the correct syntactical forms. But again experience has shown that children do not readily learn correct usage in this way. Imitation, we find, in children is a stronger instinct than logic, and children by hearing correct language somehow acquire it, by some utterly unconscious and illogical process. In writing, we all recall those beautiful scenes of our childhood's writing lesson, when our teacher stood in front of her class, beating musical time, while fifty cherubs made upstrokes and downstrokes — the elements of the letter; then came the combination of letters to make words, and words to make sentences. Yet, again, by the mandate of experience all of this orderly system has been abandoned, and our pupils, using the unthinking method of motor imitation, learn without knowing anything of the elements.

In all these past methods experience has shown that the assumption that the logical simple is identical with the pedagogical simple is false. Suspicion is legitimately cast upon the surviving methods of the logical order as a pedagogical method in other branches of study. It requires but a moment's consideration to realize that this same logical principle is the controlling one in the majority of the current methods of our present curriculum. In drawing, the majority of our methods require pupils to begin with those logical elements — lines, or points; combine them to form angles, triangles, and other regular figures; combine these again to form designs; and thence, by a process of years of training, finally to draw objects of natural form. Or in music, our prevailing systems have analyzed songs into tones, and tones into their logical simples of pitch, duration, and quality. Artificial exercises and drills are then manufactured, and pupils begin with these simples and are expected to build up, largely as a matter of conscious reason, the complex combinations, step by step, thru the technique of scale practice, staff notation, and chords, until finally in late years they are expected to sing songs. Nevertheless, in many of our kindergartens and schools there are teachers who, abandoning the doctrine that all education comes thru the reason, commence with songs and, in some illogical and unsystematic way, are producing results whose success cannot be questioned. In literature, our prevailing systems contend, with admitted success in argument, that before a pupil can be expected to appreciate emotionally a sentiment he must have a thoro intellectual groundwork in structure and in rhetoric. Yet all experienced teachers have discovered that success has been reached by striking at the core of the sentiment illogically. In history, while strict method requires us to begin with the logical simples of chronology and systems of government before we attack the details of complex form, still experience in the past few years is insisting that we begin with the details, with the complex culture forms, and leave our schematization on logical principles till the end. It seems inevitable, from a standpoint of reasoning, that the logical simples of mathematics should precede, and that the

mind of the pupil should be led logically from the simplest conceptions, in a mathematical sense, toward concrete application. Nevertheless, practical experience has struggled against the theory, and in very recent times the logicians have awakened to the realization, and, humorously clothed in the name of "psychology," are now crying "Halt!" They wordily tell us that the conception of ratio, which unquestionably is the logical simple of mathematics, is consequently the pedagogical simple, and therefore the beginning point for instruction. They insist that the primary pupil must carefully be deterred from the notion that he has four fingers, but must be taught to realize the elementary fact that he has one finger taken four times, or, more correctly, in the ratio of four.

But in recent years experience has been reinforced in its resistance to the logical order by modern sciences. Psychology is going far to show that logical power serves as a means merely of grouping facts, and that its appearance is late in the development both of the child and of the race.

Modern neurology is establishing in concrete detail the principle that the nervous system is made up of areas of parts, which are, to a certain degree, independent of one another in structure and function, and that each ripens or becomes functional at periods which are predetermined by hereditary forces beyond the legitimate tampering of pedagogs. Dr. Flechsig has traced this order of development in young infants with extreme nicety of detail. The order of development seems ever to follow the order which race experience has established. In other words, the process by which knowledge is acquired by children is determined more by lower race forms of psychoses than by the mental processes of civilized human adults.

Dr. Flechsig's studies upon the nervous systems of infants have shown beyond question that there is a definite order in the development of the various brain areas. The localized areas of sight, hearing, touch, and the motor regions of bodily movement, mature earlier than certain other regions to which Flechsig has been so bold as to ascribe the function of reasoning, higher ethics, and æsthetics. The principle of anatomical structure of the nervous system is suggestive of such a view. There is a class of nerve cells, which, in the terminology of Dr. Hughlings Jackson, we may call the lowest level, whose fibers, motor and sensory, deal directly with foreign tissues — muscle, skin, etc. Above them is superposed a second level of cells whose fibers are not in direct contact with foreign tissues, but merely act as modifying influences upon the lowest-level cells. In a similar manner other still higher levels are superposed upon those of lower order. The function of the higher level ever seems to be to introduce modifying factors into the action of the lower cells. This principle is neatly illustrated by certain forms of paralysis, which do not at once destroy all movements of some limb, but at first merely elide certain of the more delicate and accurate movements. The

explanation which is advanced is that the seat of disease is in the higher level, thus affecting the finer modifications, while the lower-level movements of the same limb remain unimpaired. Similar phenomena are to be observed in forms of aphasic diseases of speech. Further, so far as the ripening process can be observed in the brains of infants, the order is always from the lowest level toward the higher levels, from those which are most directly connected with the outer world of sense toward those which are more remotely removed from it.

Now, the essential of logical thought lies in the power of thinking relations which are not directly connected with sense. There are relations which are essentially sensuous. For example, a fence board between two posts is a relation which can be apprehended by the senses. It can be felt and seen and brought to consciousness by the brain structures and areas of sense. So also with the yellow color common to an orange and a lemon. But there are relations which are abstract, such as most of the mathematical notions we have such difficulty in inducing primary children to comprehend, the relation of cause and effect in our science teaching, form relations in drawing, logical relations in grammar, causal relations in history, etc. If now we are to admit that the sense areas or regions of the brain mature some years earlier in a predominating sense than the centers of the higher levels which deal with the more abstract relations that are removed from the senses, we find a plausible explanation why experience has found such difficulties in the way of enforcing the dogma of the logical order upon the theory that it is identical with the pedagogical order. Lloyd Morgan has laid it down as a conclusion of his extensive studies that only adults think in terms of abstract relations; children use them only feebly, while their absence in animal psychosis constitutes the essential distinction between the mentality of animals and that of man. In neurological terms we might similarly say that the highest-level structures predominantly ripen in adolescence, while in childhood the mentality directly or intimately connected with sense enters its nascent periods. For education, therefore, our curriculum, based upon this view, should be adjusted, not upon a basis of subjects, but upon a principle of dealing in childhood with the more sensuous side of the topics treated, leaving abstract relations for the later period.

For example in number, children at three or four years learn to count to one hundred or more with zest and interest; but this is merely a language phenomenon, the learning of a series of words in a certain order by heart — one, two, three, etc. A child is five or six before he takes ar interest, as a rule, in counting or numbering objects; but even then it is to be observed that he takes little interest in the abstract numerical relations which, under our curriculum, we are ever attempting to force upon primary children. There is certainly an ample field in the kindergarten for exercise of the mere counting instinct, and a little later in counting and

arranging objects in simple groups, recognizing these groups when seen without counting, and in memorizing some of the simplest combinations of objects — not of numbers. In the primary school all teachers of experience will agree that there is no difficulty in teaching the child to perform all the common arithmetical operations, provided the material with which he deals consists of objects which he can sense, and is not numerical symbols of abstract relations. Many schools are now omitting all arithmetic in the first one or two years of school. It would seem that this is a step in the right direction so far as the understanding of figure work is concerned, but there is no necessity for it so far as the calculation in terms of objects is concerned.

Abstract cause and effect are the logical simples of science as such. But scientific cause and effect are relations which do not belong to the sense areas of the brain. They seem to mature late. We need a lower-level science for children, which shall take advantage of their crude nature interests, mixed as they doubtless are with bits of myth and nature awe, but always in strong sense-pictures and hereditary impulses. The child has no interest nor power to follow out long logical sequences of cause-and-effect relations. Barnes, Lindley, and others have shown that the child's thinking is done in a fragmentary sort of way, hopping and skipping from one strong mental picture to another, leaving out the connections which are contributed by higher-level thinking. There seems no place for the kindergarten classic which begins with the bread, proceeds to the baker and dough, then works back to the miller and flour, thence to the farmer and wheat. We encounter the same difficulty when we insist upon the child following the connection between water and evaporation, thence to clouds, their condensation by cold, and finally to raindrops. The child is delighted with the experiments, but that which we especially want him to get — the logical connections — is just what he does not take strong hold of. His physical science belongs to the experimental kind, with all the reasons and the connections of abstract relation left out. Similarly in natural history he runs readily to collections, but he wearies when we attempt to add to a collection the abstract organic relations which make of it true science in an adult sense. There is a place in the kindergarten and primary school for a science upon the basis of the collecting instinct, but relational science must be left for a later period.

The development of the child's literary and historical interests shows us another phase of the same principle. The child loves the "Mother Goose" jingle, the fairy story, and the myth. The essential difference between this class of material and history and literature proper is that the latter require the mind to be focused upon the connection and relation between facts, while the jingle or the fairy story gives us merely the fragmentary sense-pictures, disconnected, and with a most cheery disregard of all causal relations. "Mother Goose" has its place with the youngest

kindergarten children, giving place gradually to the fable and fairy story, and the historical interest does not make itself at all conspicuous, Mrs. Barnes has told us, until the ninth or tenth year. The child then begins to give his attention to the causal connections between these sense-pictures.

Or we may illustrate from the ethical development of the child. The infant and young child confuse "what is right" with "what I want," because they do not deal with abstract ethical relations. But repeated conflicts generally leave the child of four or five to nine or ten years in a state of conviction that wrong is what mamma forbids and that right is what mamma permits. He learns concretely and specifically what these wrongs and rights are. He has no abstract principles of right and wrong, and he follows the law in the letter, rarely in the spirit. He imitates others' actions, and is ready to justify any of his faults upon the ground that so and-so did the same thing. Nevertheless, he clearly recognizes authority, accepting it as an incontrovertible fact of his sense-experience. The kindergarten and the primary child need to be told crisply what is right and what is wrong, and to obey promptly. There is no place in philosophy for argument on the basis of ethical relations. In observing the child's story preferences we find that he is intensely interested in the problems of right and wrong, but always in a concrete black-and-white way. The type of morality we find in *Jack and the Beanstalk* appeals to him, and leaves no place for the delicate shadings which the Sunday-school and the kindergarten story are prone to force upon him. In the matter of the education of the æsthetic nature, child study has the same struggle over again to prevent the forced introduction into the kindergarten of delicate æsthetic relations which ripen normally in adolescence. In drawing, the many studies — those of Barnes, Brown, Lukens, O'Shea, Mrs. Maitland in this country, Sully in England, Ricci in Italy, and Passy in France — agree conclusively in showing that drawing in the kindergarten and early primary years has little or no foundations in what we call æsthetic appreciation. The child's drawings are picture-writings of the fragmentary mental images which come into his mind, and he cares little or nothing whether they represent accurately some object. Accurate representation does not seem to appear until the child is ten years or more, under ordinary conditions. But there is an immense field for the kindergarten and primary school in developing a curriculum along the line of picture-writing. Such work manifestly strengthens all other fields of activity, especially language ; and after telling a story in pictures the child is better able to tell the story in words. The kindergarten child is not interested, to any appreciable degree, in drawing regular geometric forms, in design, nor in copy work. These interests are just beginning in the latter part of the primary school. Nor has the child the powers of accurate finger movement to do such work.

In the sister-art, music, studies have well demonstrated that young children are very fond of simple folk songs which have been used to express the emotions of religion, patriotism, and sentiments of the home. Music as a training in the appreciation of the masters has a later place, tho it is certainly true that the power to appreciate by ear and to express by voice is farther advanced in children than is any other artistic instinct.

RACIAL TRAITS IN THE GROUP ACTIVITY OF CHILDREN

BY C. C. VAN LIEW, DEPARTMENT OF PSYCHOLOGY AND PEDAGOGY, AND SUPERVISOR OF TRAINING, STATE NORMAL SCHOOL, LOS ANGELES, CAL.

The thoughts which I have to offer in this paper have been suggested to me, primarily, in looking over some returns made in the State Normal School here (Los Angeles) upon the "Spontaneous Play Activities of Children." My conclusions, however, have been drawn in part by a comparison with studies in the same or related fields, especially those by Sheldon ("Institutional Activities of American Children," *American Journal of Psychology*, Vol. IX, p. 425), Burk ("Bullying and Teasing," *Pedagogical Seminary*, Vol. VI, p. 336), Johnson ("Rudimentary Society among Boys," *Johns Hopkins University Studies*), Gulick ("Psychological, Pedagogical, and Religious Aspects of Group Games," *Pedagogical Seminary*, Vol. VI, p. 135). These studies and others have served to emphasize the very great educational significance of group activity among children. A great many cases reported to me by my students, as the result of direct and objective field work, so to speak, in the study of children, have served to emphasize the same thought. The query naturally presents itself as to what it is that constitutes the vital force, educationally, in the collective activity of children. It is the purpose of this paper to suggest a tentative answer to that question — one that may be, perhaps, suggestive of a method of approach and study of the problem in the future, tho it is not essentially original.

In comparing cases that have been brought to my attention, it has occurred to me that Le Bon's law of "the crowd" may be of service in getting at the common actuating principles in group activity among children. According to this author the mind of the crowd is something very different from a mere summation of individual minds. The crowd is characterized by a mental unity, in which each member has surrendered more or less of his individual self; which is, in fact, a new chemical

compound, as it were. This mental unity is ordinarily not secured by a union of the highest, latest, and most individual traits of men, but by a fusion of their oldest, most instinctive traits. As soon as we become members of the crowd we are thrown back upon the unconscious substratum of action, upon heredity, upon the "genius of race." To put it neurologically, we descend to Hughlings Jackson's lower and middle levels, thus cutting out the higher centers of reflective action. In consequence, the action of crowds is lacking in those elements which mark individual excellence and are the product of its most recent training, but rich in the fields of simple sensory and instinctive reaction. Keep the crowd in the realms of sense and instinct, appeal to it chiefly thru the law of suggestion, and you can determine its action. Raise it to the higher level, where each of its members is thrown upon resources that distinguish his recent training as an individual, and the crowd dissolves, because you have destroyed that which is the essence of a crowd, the unconscious, instinctive, and common substratum of action. I believe that our ordinary, everyday observation of the crowd will serve to substantiate in general Le Bon's law of its action. In heredity and that sense-life which men have in common we have some light thrown upon the unconsciousness, the irrationality, the impulsiveness and explosiveness, the great suggestibility, the fickleness and irresponsibility of crowds, as well as upon their strength and dangers.

I believe, furthermore, that this same law of the crowd is suggestive in studying and understanding certain features, at least, of the group activity of children. Indeed, Sheldon's study alone has shown that as children advance in years they tend more readily to engage in activity in large groups, and that in the later years of childhood, even well over into adolescence, the tendency is strongest to resort to primitive interests and instincts. Yet this is the period in which the child is supposed to be advancing very rapidly toward an individual dominance of reason. Observations in this field show that it is group activity, in fact, which most readily stimulates the older and primitive instincts in children. It is true, for instance, among the juvenile offenders in our large cities. Individually they are cowardly, for personal resources are narrow and limited. Collectively, the "old Adam" is seen to wax to gigantic proportions. But the law may be illustrated not alone in criminal or degenerate youth. Healthy youth exhibits its workings equally, tho under less dangerous, often under favorable, conditions.

My thought is that the conditions of group activity are such as directly to favor the development of primitive instincts. Each boy of a group, left to himself, would seldom evince the violent outbreak of ancient instincts which often characterizes his group as a whole. If he is morally and physically healthy, he will not alone, for example, ordinarily indulge to the same extent in acts of cruelty, of depredation, and the like. In the

group the unconscious substratum of fellowship, the instinctive in human nature, is a bond, powerful because it is deep-seated and old enough in nature to have become unconscious; it is ever ready, upon the favorable suggestion, good or bad, to level the features of individual training and to carry the actions of all in favor of a common feeling or a common impulse. This is the reason, for instance, why a contagion of questionable sport seems unaccountably to spread among boys of exceptionally good environment. The unfavorable suggestion sweeps them away by the strength of its appeal to the lower, racial instincts.

Yet, by no means all this influence in the group is unfavorable. To begin with, Gulick has called our attention to the fact that a large number of the best traditional physical games which appear as soon as boys begin to be active in larger groups, such as tag-games, prisoner's base, black-man, hare and hounds, etc., were evidently the outgrowth of a response to such old racial instincts as hunting, roaming, predatory contest, and the like. Sheldon's report reveals a large number of activities of the group order which are rooted in old instincts. Among the cases which have come under my own observation, among others, are many plays representative of hanging, nagging, terrible animal games, depredation, especially upon a rival party; cave dwelling, spying, robbers, haunting gloomy places, and enacting dismal and uncanny scenes, or telling like stories; charms and fetishism, following my leader, playing Indians, soldiers; initiation tests of courage, wits, spirit, and endurance; severe imaginary punishments; camping, carnivals, hunting, etc.

I am aware that two objections may be raised to my use of all these illustrations in substantiation of my thought. First, it may be said, many of these activities are too highly organized to belong to the law of the crowd. So far as their conscious development goes, this is quite true. Yet all which are not mere imitation of others probably found their origin in a very spontaneous and unorganized form of activity, but moved later toward the organized form in which tradition crystallized them. There are many instances observable of this spontaneous growth of group sports among children today. I have a record of one group of children who were constantly producing games in this way. They started with the simplest, apparently least purposeful, action — mere outbursts of a sportive crowd spirit — and developed set games to which names were given.

In the second place, a great deal is claimed today for the related principles of suggestion and imitation. With a great deal of justice they have been regarded as constituting a well-nigh universal principle of connection between individuals and society. It may be claimed that many of the forms of group activity already cited are the result merely of the single universal instinct of imitation, which is common to all ages of life

and in no sense transitory or rudimental. The very evident influence of imitation in most of these activities, in fact, such as the plays of firemen, robbers, Indians, soldiers, cannot be denied. But when we have admitted the great influence of suggestion and imitation, we have still failed to answer one very important question: Why does a child so often follow, especially under conditions of the group, suggestions or copies that are most foreign to, or least forcible in, his environment? What is the principle of selection in imitation? Why this persistence of primitive traits in the face of the most favorable modern environment? It seems to me that right here we are again forced back to the thought with which we started. The vestiges of racial experience in the child, his instincts, furnish the mainsprings of both his emotional life and his action, in spite of the fact that imitation may lead him to the sphere of ideas in which emotion and action operate, while the association in the group offers the most favorable conditions for the outbreak of primitive impulses. Yet imitation seems to exert a modifying influence upon all instincts. As is well known, the force of imitation is apparent very early and lasts till the age of usefulness in life is past. Thus it parallels all the instincts of the important periods of childhood and adolescence, and influences their (the instincts') development. Thus the instinct of vocalization initiates experience in the organs of speech; imitation seizes upon its products and fits them to the demands of the social environment. The instincts of play, graphic representation, dramatization, and the like are rooted deeply in instinctive muscular and emotional reactions; but they display the constant modification of imitation in the light of environment. A like phenomenon may accompany any one of these instincts, as of collection, roaming, hunting, acquisition. As they appear, imitation determines very largely what content of experiences, and ultimately of ideas and thought, they shall yield. And yet the instincts are the mainsprings, the sources, of emotional life, deep-seated, vital, and strong. They will have to be reckoned with in an efficient system of education.

In part, this relation which subsists between imitation and suggestion, on the one hand, and the primitive and social instincts, on the other, seems to me to offer the key to the educational problem. While heredity prescribes conditions of education, in general too radical to be defied, it does yield very readily to those influences of environment which work in harmony with it. Speech, perhaps, illustrates the truth most forcibly. A fundamental, hereditary function underlies the faculty of speech; yet it is very easily molded by force of environment into the forms of language which surround the child at the time of speech acquisition, no matter what the place of his birth. In no phase of child activity is this more apparent than in that we have called group activity. Let us illustrate by the story of one group of boys.

"Five charter members organized a secret society, called the B. B.'s, which meant Buckeye Boys. They were natives of Ohio, and the seal of Ohio was their emblem. The organization continued five years, from the time they were twelve until sixteen. Everything was very secret, not even their name being known. There were two corps of officers, one for meetings, which were held weekly, and the other for field work or tours. A president, secretary, treasurer, and critic were home officers. Amusements, business, essays, papers, and readings took up most of the time. A corporal, cook, fireman, picket, and sergeant-at-arms were for field work. The purpose of the organization was fun, fraternity, and the intellectual advancement of its members.

"They frequently took long excursions into the country, sometimes taking along several chickens, bread and butter; then they would make a raid on a friendly farmer's potato patch or cornfield and secure enough to fill their kettle, which the cook by this time had steaming over a fire near a cool spring of water. One boy's father was a blacksmith; they became deft in welding iron into shapes for their use, such as cranes for their kettles, badges on which the initials B. B. and the seal of Ohio were molded. A good cannon was made on wheels by using a large elm stick, boring a hole thru it, and driving a three-inch gas-pipe into that. On the outside of the wood iron bands were fastened, the whole covered with sheet iron, and more bands put about this. Powder was used as the explosive. The cannon was used in times of peace for celebration of great events and in times of war as a means of defense. It was nicknamed Baby Betsey, as it bore the letters B. B. One boy's father had been a captain in the war, so they became well drilled. They had all the military officers, and made some of their own weapons. They were a long time in making a boat out of gasoline barrels, beer kegs, and boards bent over them. Great fun was had the day they hitched their fathers' horses to a large wagon and hauled it several miles to a stream where they launched it. They were always Indians on such excursions. They dug a large cave in a hillside, where they hid their treasure. A wooden door closed the entrance, and they covered it with earth. Other trips were made to woods where they had permission to cut wood and sell it. They sold some and gave some to a poor lady they knew.

"The greatest fun was the initiation of a new member. He was first blindfolded, turned about for a minute, led over fences, thru fields, and into an orchard where many trees would impede his advance. He was told that if he caught a member he would be exempt from the other trials, but if he failed he was led farther to encounter the goat. A real goat's head was fastened to a padded rail. He was then asked how many fingers he had; when replying five, he was told no, that he had six, and no six-fingered boy could belong to their lodge. They would count his fingers so as to convince him of a sixth, which was then cut off. After being fed

upon chocolate-coated cayenne pepper he was considered a worthy member."

I realize that this case, which I have ventured to give at length, is exceptional perhaps. Yet it well typifies many of the cases of children's group activity. It is only the typical to which I shall refer. Here we have the interplay of the suggestions of instinct and those of the environment. Among the former we detect traces of the social and sympathetic sense, of sorcery, pugnacity, hunting, migration, construction, torture, etc. Among the latter a variety of actions, products, laws, purposes, and the like, belonging strictly to the boys' environment. The former unquestionably furnished the mainsprings of interest and action. The latter dominated, in this case on the whole fortunately, the circle of ideas and experiences.

Is there not a lesson for education in this? Is it possible wisely to circumvent even the rougher, cruder instincts in human nature? And is not the method of treatment rather one in which education supplies an environment favorable to adaptations, leaving to the child, within reasonable bounds, the full force of his heredity? I know that this cannot be done in every instance. Some instincts do not seem always to be amenable to the better suggestions of environment. But the majority of them, I believe, which are not directly in harmony with the present social environment, yield to a process of transformation. The thought of transformation, therefore, should be kept uppermost in the effort of parent or educator to control or modify the instinctive side of development. The power of suggestion and of favorable environment, therefore, should be applied chiefly in the control of the group for educative purposes.

Again, this recognition of the force of the group in education will not necessarily stand in the way of individual development. Especially is this true when the group can be given greater or less freedom of movement. As the study of children in groups has shown, the natural selection of individual forces proceeds here as elsewhere. Leaders arise thru force of character; the better moral ideals may dominate; there are trials of individual merit, endurance, and strength; contest and fellowship are constantly disciplining, not only socially, but individually.

Finally, the force with which ideas and actions develop within the group suggests that its interests may be made points of departure in instruction. Whatever feelings and instincts appear here are marked by intensity and strength. It is just for this reason, in part, that the experiences they develop become lasting impressions. Why not, then, following the suggestion of Colin Scott with respect to fears, draw the theme in art, literary, or practical instruction at times from the activities of childhood which are so strong and prominent in the group? The case cited

above suggests this. Sheldon has reported many cases suggestive in the same way. In many of the cases that have come to my notice I have found the group strengthening the interest in the story and exercising the faculty of language, furthering the scientific interest; training to the appreciation and exercise of law and order and fellowship; stimulating native wit, invention, self-help, and construction. All this is possible, I believe, largely because group activity deals with those primeval interests upon which, after all, human nature is built, and because thru them it awakens in the individual a deeper sense of strength.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 12, 1899

The meeting was called to order in Turner Hall at 2:30 P. M. by Dr. W. O. Krohn, Hospital, Ill., the vice-president.

After invocation by Rev. William Cleaver, an exhibition of class exercises in German gymnastics was directed by Mr. C. J. Rohde, Los Angeles, Cal.

Following this came the address of the president of the department, G. W. Fitz Harvard University, on the "Conditions and Needs of Physical Education of Today."

The next paper was read by Dr. Frederic L. Burk, superintendent of schools Santa Barbara, Cal., the subject being "Some Influences which Affect Growth."

After a vocal solo by Mrs. Matthewson, Professor W. W. Hastings, of the University of Nebraska, gave a paper on "Anthropometric Studies in Nebraska."

T. A. Story, of Leland Stanford University, led in the discussion of Mr. Burk's paper, followed by W. E. Watts, Chicago, Ill.

The president appointed as nominating committee:

Dr. Augusta Requa, New York city. Robert Krohn, Portland, Ore.
Mrs. Kate D. Pollans, Waterloo, Ia.

SECOND SESSION.—FRIDAY, JULY 14

The meeting was called to order at 2:30 P. M. by the vice-president, Dr. Krohn.

After a violin solo by Mr. C. J. Fox, a class in wand exercises was led by Mr. Rohde.

The first paper was on the subject of "Play Interests of Children," by Will S. Monroe, of the State Normal School, Westfield, Mass.

After music by the Imperial Quartette, a paper on the subject, "How may Fatigue in the Schoolroom be Reduced to the Minimum?" was presented by Superintendent H. E. Kratz, Sioux City, Ia. The same was discussed by Dr. W. O. Krohn, Hospital, Ill., followed by Superintendent Powell, Washington, D. C., and Mrs. Rolfe.

The Committee on Nominations reported the following:

For *President* — George W. Fitz, Cambridge, Mass.
For *First Vice-President* — W. O. Krohn, Hospital, Ill.
For *Second Vice-President* — Miss Ellen Le Garde, Providence, R. I.
For *Secretary* — Miss Mable Pray, Toledo, O.

The report was unanimously adopted, and the department adjourned.

REBECCA STONEROAD,
Secretary.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

BY PROFESSOR G. W. FITZ, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

While deeply regretting my inability to be in Los Angeles, I heartily appreciate the privilege granted me of briefly addressing you upon the condition and needs of the physical education of today.

The present position of physical education offers much of encouragement. Educators and teachers are becoming more generally appreciative of the educational value of exercise. Physicians and parents recognize its hygienic value in promoting growth, and in producing that indefinable quality which characterizes the physically active, and which we call vigor. School system after school system is placing physical training in its curriculum. It would seem as tho now were the time when the physical director and the teacher of gymnastics could look forward with confidence to coming into his own.

But the present situation contains a threat as well as a promise. The growing demand for the teaching of physical training has been more than met by the rapidly increasing supply of trained teachers. With the consequent rise of competition have come those rivalries of schools which threaten the unity of purpose and heartiness of co-operation upon which our future progress rests. The need for physical training is so great and so varied in its aspects that but few appreciate it in its fullness. One becomes impressed with the poor carriage of school children, and indeed of the majority of mankind, and feels that physical exercise and training should aim at the improvement of the carriage. Another notices the awkward restraint of movement, and is impelled to devise a system of culture which shall give freedom and grace. Another notices asymmetry and poor development, and devises such measurements and training as shall make for normal development. Still another is interested in athletics, and thinks that it is the panacea which will bring about human physical perfection. The lover of childhood finds in spontaneity the great organ note of human life which harmonizes all activity, and so believes games and plays to be the truest training for school children.

As a result of this diversity of claim, school officers and superintendents are beginning to hesitate about the introduction of physical training, overwhelmed by the necessity for a careful consideration and just valuation of the various systems, each one of which in its struggle for

supremacy claims to be alone in its completeness and adaptation to the needs of the schools, and too often does not hesitate to condemn its rival as ignorant, careless, poorly equipped, and blind to the great underlying principle of gymnastic progression.

This spirit of the schools of physical training has seriously militated against a calmly critical study of the essential problems of physical education. Were the opportunities now possessed by physical trainers utilized for a scientific investigation of these problems, we should not now lack a concordant physiology and hygiene of physical exercise, a co-operative synthesis of effort in defining the physical needs of children in kindergarten, primary, grammar, and high schools, or a just, mutually helpful emulation in furnishing the means for the physical activity thus defined. We should have a clear idea of the relation of physical activity to growth, to the development and healthful action of the brain centers, and to the fatigue consequent upon school work, so that we should be enabled to judge more accurately of the kind and amount of exercise most effective as a constructive and remedial agent, and the conditions which determine its effectiveness. This can only come thru comparative studies made upon the results produced by the training offered in the various systems. At present Dr. Foster, of Bryn Mawr, is the sole contributor to this comparative study.

It seems to me that this movement can no longer be delayed. Disagreement, sharp criticism, and conflicting claims cannot but make our cause ridiculous and delay a full recognition of physical education. We must unite all conflicting factions into an earnest and efficient body of students who will be eager to grasp the truth, unmindful of its source, unprejudiced by its bearing upon preconceived ideas. This is no time for sentiment, for blind following of leaders, or the blinder application of cut-and-dried rules. It is no time for political methods, for the bribery of school and college officers to introduce a special form of gymnastics by offers of free instruction or even of gymnasia. It is a time for loyal, conscientious work and study, and for the re-examination of the foundations of the theory and practice of physical training. The continued existence as a theoretical entity of any system depends today upon a careful study and adaptation of the newer results of physiological and psychological work. It is not too much to say that our ideas of the relation of physical exercise to school work may be radically modified within the next five years.

Some advance toward this co-operation has already been made. The American Association for the Advancement of Physical Education at its convention in Boston, in April, considered the question of establishing a uniform system of examinations upon the basal studies of the curricula of normal schools in physical training, including anatomy, physiology, hygiene, physiology of exercise, and pedagogy, and of giving its certificate

to those who, by successfully passing these examinations, give evidence of adequate fundamental preparation for the teaching of physical training, regardless of their specialization in any one of the several so-called gymnastic systems. Steps were taken to appoint a committee of nine to prepare this matter for presentation to the next convention two years hence. It was also unanimously voted that a committee of fifteen be established somewhat upon the basis of the famous Committees of Ten and of Fifteen of the National Educational Association, with representative membership drawn from all classes of teachers, physicians, and psychologists, to consider the physical needs of the various grades of the public schools and determine the amount of physical training which should be introduced into each grade. Upon the successful outcome of this and similar plans for co-operative investigation and critical study must depend the growth and vigor of physical education. Harmonious co-operation must take the place of antagonism. We must be students of the truth of physical education, not merely exponents of fixed systems.

THE INFLUENCE OF EXERCISE UPON GROWTH

BY FREDERIC L. BURK, SUPERINTENDENT OF SCHOOLS, SANTA BARBARA, CAL.

It is not the purpose of this paper to prove that exercise affects growth. Let us accept this as a fact. An army of gymnasium directors are ready to show that, in certain instances at least, certain exercises have produced marvelous enlargements of chest capacity, sudden increases in the circumferences of the biceps, have straightened misshapen limbs, squared sunken shoulders, and filled in here and taken out there, as a potter shapes clay. Nevertheless, there have been failures now and then. Clearly, there are limiting laws in promoting the function of exercise upon growth, and it is with some of these I shall deal.

What is growth? It is not getting fat, and to say that it is simply the process of getting bigger is inadequate. It is admittedly true that we must include under the term "growth" a vegetative phase which Aristotle pointed out, and this certainly has to do with the increments of tissue — their size, form, symmetry, and relative proportion; but this is manifestly not the only phase, for it does not include the most pertinent of the aims of physical training — growth in the accuracy, rapidity, endurance, strength, execution of long and delicately co-ordinated sequences of movement, which go to make up the requirements of modern life. No new muscles have been added to the hand of the skilled mechanic, artist, or musician, nor have the size, form, and relative arrangement of the muscles been modified in any degree commensurable to the prodigious increase in power. The muscular differences between the hand of a monkey and the

hand of a man are hopelessly inadequate to bridge the chasm of increase in power, co-ordination of movement, and delicate adjustment. Even in the matter of strength no theory based upon muscular development alone meets the fact that civilized races are superior to the uncivilized, or the fact, shown by Féré, that artisans whose daily work requires exercise of some measure of intelligence are stronger than artisans whose work is almost wholly muscular in form.

In the form of growth which has power for its aim we certainly must turn from the muscular to the nervous system; nor can we accept as yet the common assumption that growth toward ideals of muscular beauty, symmetry, and proportion is any certain guarantee of growth in power. Indeed, we can have growth thru the vicarious exercise of muscles. Fechner several years ago found that by learning to write with his right hand the figure 9 backward his left hand was vicariously taught to accomplish the same feat, tho it had not been exercised. Miss Smith, of Yale, for ten days exercised her right hand to insert a needle point into a small hole, so arranged electrically that any unsteadiness was recorded. Of 200 trials daily the percentage of error sank in the ten days' exercise from 39 to 12 per cent. The left hand was tested at the beginning and end of the ten days. It received no exercise in the meantime; yet the percentage of error had sunk from 50 to 24 per cent. As early as 1858 Volkmann and Fechner had shown that by exercising the sensibility of any given area of the skin on one side of the body the power of discrimination of compass points on homologous areas on the other side increased, tho they were not directly exercised. Even in the matter of strength this vicarious influence has been shown. Miss Brown, at Yale, for thirteen days exercised her right hand in squeezing a mercury dynamometer bulb, with the result of increasing the strength of this hand from 28.8 to 48.6—an increase of about 20 points. Her left hand, which had received no exercise, nevertheless showed an increase in strength from 29.6 to 42.3—an increase of 12.7 points.

We have in these experiments an agreement which leads to the conclusion, within the limitations of the experiments quoted, that growth in power can be effected thru exercise of the corresponding part of the opposite side of the body, without muscular exercise of the parts affected. How is this fact to be explained? Certainly any theory which seeks to find the explanation in muscular conditions most fall far short of adequacy. If for growth in power we turn our inquiry to the nervous system, the explanation that exercise affects not only the cell groups governing the muscular parts involved, but also, in a greater or less degree, all cell groups in association, offers a plausible solution.

There are other principles of vicarious influence of exercise upon growth besides that of bilateral association. Féré, in the *Revue philosophique*, two years ago reported a series of most interesting experiments

upon a subject who exercised his hand by simple and easy flexions of fingers. After three months of such training not only was the motility increased, but also strength, precision, and reaction time of the entire hand. Clearly, there must be some explanation for the phenomenon in some neural association, quite beyond any muscular training.

The separation of the problem of growth in the nervous system from that of growth in the muscular system introduces some important and significant modifications. Growth, as a vegetative swelling in size, is a more primitive form. The protozoan cell swells in size until it reaches a certain point in maturity, then it divides, and each daughter-cell repeats the process. Most of the tissues of the human body effect growth by means not distantly differentiated from this primitive form of vegetative increase. But in the nervous system this form of growth ceases forever in the early embryological period. The number of cells does not increase thruout life. We have, therefore, in the nervous system a *sui-generis* condition. Growth in the nervous system after birth consists in the awakening of latent cells into functional activity, and in the extension of associational fibers, bringing the cells into an ever closer co-ordination one with the other and with foreign tissues of the body. Ramony Cajal suggests plausibly that the energy which was employed in growth by cell division now passes into the higher forms of fiber extension and the development of latent cells. Exercise administered at the proper time is certainly a factor in producing this growth. Omission of it, we are almost justified in asserting, at least in many cases, prevents development. In any adult brain, even in old age, multitudes of undeveloped cells are to be observed, and growth of finer fibers is practically continuous thruout life, as the studies of Kaes, Vulpian, and others would go to show. Donaldson has shown, from his study of the brain of the blind and deaf Laura Bridgman, that in the visual and auditory areas there was an excessive number of undeveloped cells, and the number of fibers was very significantly small. These areas had received no exercise. Also Hamarberg, in his comparative study of idiot and normal brains, shows beyond question the woeful deficiency in the development of cells and fibers in the defective regions.

We now pass to some of the principles which condition growth and limit the function of exercise.

1. Hereditary structure provides the framework for the main form of the more important fundamental movements and activities. Prior to birth the nerve cells are already formed and are lying dormant in their respective areas, and their larger connections, direction of course, and main associations are established, anatomically, long before they become functional, and therefore long before exercise can legitimately become a factor. This certainly applies to all of the well-established racial activities. To what extent preformation exists for activities less established,

of course, can only be a matter of conjecture. Physical training, avowedly, has for its aim the development of those fundamental and basal powers which are old to the race, rather than those which the individual may possibly originate for himself. The chief function of exercise certainly is, therefore, to reawaken that which is latent. We may say, perhaps, that exercise in early life is a factor which is in inverse ratio the force of hereditary predisposition; that is to say, the more deeply instinctive a movement, the less the sphere of exercise. Chicks readily run at the bursting of the shell, but in the less instinctive activities, such as methods of capturing prey and selecting good from bad food, skill is acquired, as Lloyd Morgan has shown, by exercise and training. Children need comparatively little training in learning to walk, but an enormous amount in learning to write.

2. A popular conception is prevalent that by introducing certain exercises we may develop an organism in any order at will. But we are met by the fact that internal provision of hereditary origin determines the order or sequence by which the nerve centers governing the various movements come into functional activity. Flechsig in his researches upon the nervous systems of the fœtus and infants has unquestionably established this. In this primitive period Flechsig has traced in most interesting detail the early sequences — growth first in one area and then in another, a bundle of fibers extending from this area to that, etc. There seems to be a fixed causal sequence in this order, so that a ripening in one area or center becomes the cue for the ripening in another.

3. A principle of overwhelming significance is that this determined sequence of development is an evolution from those structures or movements which represent the oldest racial forms toward those which are the most recent additions of the race; in other words, that the movements of the individual unfold in an order determined by the history of race development. A notable illustration is in the motor columns of the spinal cord, which convey voluntary impulses from the cortex downward to affect and modify the impulses originating in the cells of the spinal cord; while the spinal structures themselves are well matured before birth, these foreign fibers, representing the later addition of will activity, mature at a distinctly later period. Voluntary control comes later in the child, as in the race.

4. A corollary principle to that of determined sequence in development is that the time at which each area ripens tends to be approximately the same in all individuals, altho other factors modify this principle to a varying degree. For the primitive structures observed by Flechsig in infants the variation, under normal conditions, is slight, but we certainly have evidence in the later growths that this time relation is greatly modified. Secondly, all forms of growth, nervous and vegetative, are by rhythms of rest and activity. For example, among children the world over there

is a period of comparatively rapid increase in height which some place between the sixth and ninth years; then comes a period of two or three years, just preceding pubescence, when the increase is comparatively slight, suggestively analogous to the resting period of a cell after division, while it stores up energy for a new growth. Then comes the rapid shoot of the first two or three years of adolescence; then another rest, and a smaller and later period of rapid growth. As Malling Hansen, in Denmark, has shown, not only are there diurnal alternations of growth and rest, but also weekly alternations; and, further, boys grow in height two and one-half times as rapidly from April to August as from August to November, while the weight rate is just reversed, and boys lose in weight during the spring and summer; the growing period in weight is from August to November, when the height rate is at its minimum. If exercise should be employed, as we are all ready to agree, only in the nascent periods of growth, what provisions have yet been made in our systems adequate to the necessities? We are unable to take more than doubtful steps in this direction, for only the shore-line soundings of the facts relative to nascent periods and their times of appearance have yet been made by investigation. We know, for example, that the marvels of the gymnasium in developing large lung capacities is possible because the gymnasium exercise as a rule deals with adolescents, and the nascent period of lung growth falls fortunately within this period. So with a large number of other powers, the age at which gymnasium exercise usually is introduced fortuitously hits the nascent period for the given organ or movement. Roberts, in the Fifth Parliamentary Report, shows that the systematic exercises which in our gymnasiums for adolescents produce such quick responses for growth of lung capacity, strength, etc., have utterly failed when practiced by boys under twelve years. Their nascent periods in these lines have not yet come. We have much evidence to show that just before a structure comes into its nascent period exercise may be very easily effective in producing a premature growth, perhaps to hygienic injury. A kitten's eyelids do not open for several days after birth. The nerve is not medullated, that is, is not functionally mature, until the end of that period. If, however, as has been done, the eyes are forced open prematurely at birth, the exercise set up by the light causes a premature medullation of the nerve.

On the other hand, all practical observers know that exercise postponed beyond the nascent period is able to accomplish little, especially in the cases where heredity plays a controlling rôle. A bad habit of movement acquired in a nascent period is hard to overcome. A child who learns a foreign language in the nascency of the speech centers speaks without accent, while the language learned in adult life rarely reaches this degree of perfection.

5. The form of the exercise necessary to develop a fundamental function is essentially determined by hereditary structures and tendencies.

Certain forms of play are universal among children the world over, varying only in name, and extend backward in history as far as tradition will reach. The gambols of a kitten or of a puppy are the same from generation to generation. The principle is more infrangible the more instinctive and fundamental the activity. Thus there is left no standing room for originality in the invention of systems of exercise for children, especially those designed arbitrarily, regardless of heredity, to meet ideals of beauty to the ends of æsthetic exhibitions. Our business, on the contrary, must ever be to discover the form of exercise which race habit has handed down, and this we have not yet done to any adequate degree.

6. In the development of movement nature as a rule proceeds by a system of modifications of old movements. Thus speech uses practically the same muscles as those used in eating, but a higher and more recent level of nerve cells exerts a controlling and modifying influence upon the cells which formerly controlled these muscles. The elements which make for accuracy, rapidity, endurance, and dexterity seem to belong to the higher levels, largely maturing in adolescence, as the studies of Bryan, Gilbert, and others upon motor ability would suggest. For example, infants may execute a finger movement, but accuracy and rapidity of finger movement do not reach their rhythm of greatest nascency until puberty.

7. In conclusion, then, there is slight evidence of any logical arrangement in the order of development of nascent periods; nothing which can be prophesied by a systematic planning of what would logically seem to be appropriate. The key lies hidden in the mystery of race development, and there is everywhere evidence that exercise given without regard to this hereditary determining power is either ineffective or is positively unhygienic. The movements of the thumb, so all-important in human use, and seemingly so fundamental in the exercise of the hand, are several months later in their nascent periods than the movements of the rest of the hand. The infant makes no use of his thumb until he is several months old. The explanation lies in the fact that in evolutionary history the thumb came into use late. The infant at birth can grasp with his whole hand with a strength which, proportional to his size and weight, he can hardly be said to improve upon in later life. The infant's eyes tend to be independent of each other in movement, and growth in them is toward co-ordination; yet in arm development a baby is several months old before he can make a movement with one arm without making the same movement with the other. Growth in arm development is from co-ordination *toward* independence. The incongruity between eye and arm development finds a probable explanation in that in animal evolution the forelimbs were ever used co-ordinately and the eyes generally independently. And since this relation has been reversed in the primates, and especially in man, the transition is repeated in the child. It follows that notions of logical arrangements and arbitrary theories of symmetry can

be but a source of confusion in determining the order of exercises. How can we, in the state of our present knowledge, cross-section the organism at any partial period of growth and declare that, by the laws of tape and scales, this part needs development and that reducing? The proportion of today is not that of tomorrow, nor that of yesterday. The theory of proportion and symmetry may have its place and significance in the training of adults, but with growing organisms we need to know much more than we know as yet of the nascent periods, when exercise can safely and profitably be administered.

While it is unquestionably true that our systems, based upon symmetry and proportion, are producing well-formed men, it has been by no means established that these products possess surer immunity from disease, or are the fittest to survive from a race or an individual standpoint. There is certainly much biological suggestion to indicate that symmetry and average proportions have not been nature's aim; but, on the contrary, there is ever an effort to produce particular individuals, particular forms, and particular proportions. From this standpoint, the function of exercise must be ever to fulfill nature's first intention for the particular individual, and methods which tend toward averages must be classed as dangerous impediments. This does not mean that unsymmetrical forms are always nature's aim, but it does mean that muscular symmetry cannot be placed as the ultimate end of physical training.

Lastly, we must not underestimate the power of exercise, arbitrarily enforced, to modify nature's intention. The principle has already been pointed out that the more instinctive a given movement is, the less is it susceptible to outside influence of exercise. But man has few set and cast-iron instincts, as the lower animals manifest. This is not because he has a less number of instincts in tendency, but doubtless because, as the heir of all ages, he has a greater number of instincts, and they are in vigorous conflict. They hail from different origins, and at times it requires but a touch to tip the scales in favor of one or the other tendency. Doubtless exercise has it in its power, at such moments, to direct energy into one organ at the expense of its neighbor, or to overdevelop one part upon a theory of relative proportions. We have no assurance in a particular individual that symmetry is always the intention of nature.

In brief, the aim of this paper has been to present the view that exercise, while an essential and powerful factor of growth, nevertheless must, in order to be profitable and hygienic, be limited to the form, sequence, and time of application determined for it by hereditary design; that exercise, the aim of which is merely muscular form and proportion, offers an inadequate grasp of the problem; and that during the growing periods, especially of those movements which are most instinctive, originality and arbitrary systems of physical training leading to departures from racial habit are notions to be avoided.

DISCUSSION

T. A. STOREY, instructor of hygienic and organic training, Leland Stanford Jr. University.—We as teachers are interested most vitally in that portion of Dr. Burk's paper which deals with the influence of exercise on the growth of younger children. We find that the periods of natural growth for each muscle are the best periods for its development thru exercise, and that exercise applied either before or after these periods will be either ineffective or positively injurious. The natural order of development of the various muscles is a problem that has never been worked out. We have no system of physical training that takes such conditions into consideration. The teacher must use his own good judgment in his selection of exercise, taking the movements that suit his purposes best, without reference to the particular systems in which they appear. This may not be a difficult or dangerous problem when one has to deal with older individuals, but, as you can readily see from the paper just presented, the greatest caution must be exercised when younger children are in hand. That they need some sort of activity is self-evident. The most active children in school are between the ages of nine and twelve. They are never quiet. Their natural need for exercise finds expression in their games and play. The play of children is largely the same the world over, and has been so as long as we have record. The same large muscle groups have been exercised since the beginning of time. This is good evidence of a common natural demand for exercise; and these natural exercises that have trained children for ages must be good exercises for children.

Is it not a significant fact that in their play children adopt an alternation of games that varies greatly in its demands on the muscular system? Compare the activities of marbles, jackstones, or "mumble peg" with those of baseball, hide-and-seek, or prisoners' base. And have you ever noticed that these games have their own proper time in the year's program? And that a sort of inflexible law will not permit their being played out of season? May there not be a physiological reason for this alternation of games that comes to every community of children? Is it possible that the natural periods of retarded and accelerated growth are accommodated by the various games that require, as the case may be, greater or less muscular activity?

A study of antepuberal activities made upon large groups of boys and girls would do much to identify the natural sequence in development of the larger muscle groups. Such a study made in conjunction with embryological research would produce a much clearer conception of the natural unfolding of neuromuscular groups.

So far as I know, there has been no such study or combination of studies ever made from this particular standpoint. There is ample material for such a compilation, for we have many earnest investigators in both fields. But, while we wait for someone to point out these general laws and prove them true, what shall we do for our children?

Now, it is not my purpose to outline any "system." I am not sure that I believe in systems, and in the face of the many possible dangers that might follow, and in view of our lack of accurate knowledge on this subject, it seems to me that a most cautious and conservative course would be the most sensible.

Let the youngsters have their natural play; encourage the antics and gambols that have been their habit as long as there have been children. Such activities are natural, and must be largely right. But there are some dangers in these natural gymnastics, and they are common dangers, too. The control of careful, experienced minds is an absolute necessity for the best and safest results in the development of young children. For instance, we are all right-sided, right-handed, right-armed, right-legged. One muscle group may vicariously educate another, but this, as Dr. Burk has told you, is the result of

the influence of exercise on the central nervous system. Dormant nerve cells may be awakened; the nervous tissue may grow, may develop; but the growth of the peripheral muscular tissue in the groups vicariously educated is far behind the growth of the same corresponding muscles directly exercised. If left to himself, the child may be right-sided or left-sided, or, at any rate, one-sided, and this to his great injury and disadvantage. Now, there may be no great harm in being merely right-handed, but there are often more far-reaching results that are dangerous to a great degree.

The special use of the right arm has made it commonly longer and larger than the left. Its great activity often permanently draws the right shoulder down, and may produce a curved spine and a depressed chest. In many cases the delicate organs in the thorax and abdomen are subjected by the spinal curve and the depressed chest to cramped and strained conditions that interfere with normal physiological action.

It is true that right-handedness is the result of causes too ancient in racial history to be completely removed, or perhaps even greatly influenced, by exercise. We cannot expect to rearrange the cells of the central nervous system. Mr. J. M. Baldwin tells us that the more efficient hand finds its center of control in near neighborhood to that center which controls the organs of speech, and this relationship is never changed. Exercise cannot produce any different arrangement of central relationship, but it certainly may be instrumental in altering some of the peripheral conditions. The left arm will probably never be as efficient as the right, but it can do enough work to counteract the ordinary one-sided influence exercised by the right arm on the shoulder, spine, and chest, and the delicate organs in the body cavity.

Let me cite another common danger. In a great number of cases there is found a difference in femoral measurements. The right leg is usually shorter than the left. This condition is the result of habit in standing, in play, in all those positions in which the right leg supports the weight of the body. One might say that the continued pressure stunts the growth of the right femur. The results of this anatomical inequality are far-reaching. The right innominate bone must, as a result, be lower than the left; there must be a right lateral sacral curve of the spine, and the possibility of further compensatory curves of the spine is, indeed, great. All the complications that come from a weak back are easily more possible under such conditions, and all because of an inequality in femoral lengths. Here, again, the care and attention of the teacher may do much to prevent such abnormality and its probable disastrous results. If one case out of five hundred is saved, the work of the teacher is more than recompensed.

The danger of injury to the orderly development of the neuromuscular groups becomes all the greater as we attempt to apply various systems of physical culture, which require accuracy, dexterity, rapidity, great endurance, and strength. In their play our children employ the larger, more simple, fundamental body, arm, and leg movements, which we, as teachers, can wisely and safely guide to a sure foundation of sound maturity. Encourage symmetry in play; get your boys and girls on both feet; be partial to "left-sided" movements. If set exercises are given, build the series up from those simple, full arm, body, and leg movements that form the natural play of all children. The motor centers that govern these movements develop first, and are not very liable to receive injury from the exercise given by the simple movements that form the natural sports of children.

In summarizing let me say: No system of physical training can be applied with equal success to all ages and conditions.

Positions of the body often assumed tend to become permanent. The greatest care and caution is necessary to protect the child from the evils of one-sided development.

The natural spontaneous muscular activities of children are least dangerous to their physical welfare, and afford a source from which the teacher of physical training may gain safe, practical, and successful exercises.

PRINCIPAL WILLIAM E. WATT, Chicago, Ill. — It is better to prevent evil than to cure it. If sewer gas has entered your house, your doctor is entitled to credit when he has cured you of the resulting disease; but your plumber is a better man because he modifies things so that no sewer gas can get in.

There is a nerve-destroying element in the primary and grammar school which is worse than sewer gas. It is the excessive use of the pen. Our children are writing much of the time all day. When the teacher wishes to work with one class without interruption, she sets the rest of the school at a task in writing. It is the easy way to get good order, and there is no denying that when a child has been idle during a writing period he is detected at once, because he has not the necessary work to show for the time spent.

So much work is done with the pen that spines are bent, nerves destroyed, chests contracted, indigestion aggravated, and eyes permanently injured.

These evils the physical trainer is trying to overcome with appropriate and restful exercises. I wish to invite you to join in persuading superintendents generally to do less of those things which make your work so necessary. If the worst features of school work could be prevented from injuring the bodies of our pupils, directors of physical training would then have the happy task of building up perfect bodies in place of the sorry one of trying to correct, as far as possible, the deformities which result from the unhealthful occupations of the schoolroom.

Not only is the excessive use of the pen to be deplored because of its bad effects on the growing child, but also on account of its utter uselessness. Overtraining of the muscles of the hand before the age of puberty does positive injury to the hand as a writing instrument. Pupils who come up thru our schools with much training in penmanship in the primary and lower grammar grades are not able to learn to write as well as those more fortunate ones who have escaped the grind in some way, and pursue penmanship more pleasantly at a later period. Overtraining before the age of twelve dwarfs the powers that might belong to the pupils after that age.

ANTHROPOMETRIC STUDIES IN NEBRASKA

BY PROFESSOR WILLIAM W. HASTINGS, UNIVERSITY OF NEBRASKA, LINCOLN, NEB.

[ABBREVIATED BY THE AUTHOR]

The teacher who attempts the development of the life of an individual without measuring his physical vitality is as wise as the builder who attempts to bridge the Niagara without a knowledge of the strength of materials.

The period at which, in a peculiar sense, rich, full life is made is that of childhood, when public-school teachers have the responsibility. It is the period of ceaseless activity, of inquisitiveness and acquisitiveness, of latent power, of growth and development. The ultimatum of our endeavor is not head-cramming with book-learning, but the formation of character. In the final analysis force of character depends upon the sustaining power of a strong physique. The thoughtful teacher is beginning to recognize that health and development, not book-learning, are his first care; that

individuals, not things, are to be taught; that thinking, not knowledge, is power. He wants a working basis for the production of physical and intellectual power.

The first thing to know is whether and how much a child varies from the normal of his sex and age; then what kind of exercise will correct his peculiar defects. Upon the collection of a large number of physical measurements very accurate standards of normal development may be obtained.

In Lincoln, during May, 1898, two weeks were spent in taking measurements at ten schools. Twenty-five university students and instructors volunteered to assist in the work. Efficient aid was rendered by teachers and principals, and the heartiest co-operation and practical interest were exercised by the city superintendent, Mr. J. F. Saylor. More than 2,500 children were examined. Fifteen different physical qualities were taken by observers. The same number of accessory items as to nationality, occupation, heredity, diseases, etc., was elicited by question blanks sent to parents. With the aid of assistants, several weeks were spent in the calculation of results from these measurements. Up to the present time the conclusions reached for Lincoln are:

1. Girls are heavier and taller than boys during the thirteenth and fourteenth years. During the twelfth and fifteenth years also they exceed boys in height, but not in weight.

2. The physical basis of mental efficiency was indicated, tho not as accurately as in the results obtained by Dr. Porter from St. Louis schools, because the number of children near the extremes was not sufficiently large to permit the calculation of an exact mean.

3. Children of the ages of nine, ten, eleven, and twelve were classified according to nationality of parents. With but one exception American children were taller than those of foreign extraction. American girls twelve years of age were slightly shorter (two millimeters). American boys, with the exception of those eleven years of age, were heavier than boys of foreign parentage. American-born children excel in chest expansion for almost every age.

4. According to Comparative Table I[1] the statures of children of nine, ten, eleven, and twelve years from various localities arrange themselves in the following order: Belgian children (Quetelet), lowest; English children (Roberts), second; St. Louis children (Porter), third; Omaha children (Hastings), fourth; Lincoln children (Hastings), fifth; Boston children (Bowditch), last, and superior in height to all the rest, altho Lincoln children are very close to them in development. This fact of superior stature of Nebraskans has been forced upon my attention in the examination of students in the university; they are superior to Amherst, Yale, and Cornell men.

[1] To be found in the *Proceedings of the Nebraska Academy of Sciences*, November, 1898.

According to Comparative Table II[1] the same general order is preserved, except that English children in weight, or general solidity of muscles and frame, take sixth, or highest, place. Lincoln children rank at third place; the order being: Belgium, first; Omaha, second; Lincoln, third; St. Louis, fourth; Boston, fifth, and England, last. However, the ultimate development of Boston boys is superior to that of the English boys, as the mean development for the years twelve to sixteen shows.

The type or norm of Lincoln children of each age and sex has been calculated for the following qualities: weight, height standing, height sitting, breadth of chest, depth of chest, lung capacity, and chest expansion. They are prevailingly larger than St. Louis children of the same age and sex.

Upon the organization of a local physical-education society this spring, Omaha perfected its arrangements for the examination of public-school children. Under the able and immediate direction of Superintendent C. G. Pearse 10,000 children were examined during four weeks ending the second week in June.

The type of Omaha children has been calculated for weight, height standing, and chest expansion. They are slightly inferior to Lincoln children, and, because of the deteriorating influence of city life, probably inferior to the type for the state of Nebraska.

By the results obtained in Omaha the physical basis of mental efficiency is satisfactorily demonstrated and the conclusions of Dr. Porter sustained. Children of the same age and sex increase in mental efficiency according to the development of their various physical qualities, height, weight, etc. Time has not sufficed for the calculation of other qualities, but the rule is sustained as to height and weight, with but few exceptions, as indicated by the accompanying tables:

HEIGHT STANDING

BOYS

Age	Number of observations and unit of measure	Grade I	Grade II	Grade III	Grade IV	Grade V	Grade VI
Eight	No. of obser.	137	245	83	8		
	Centimeters	119.88	120.67	124.88	126.75 (?)		
Nine	No. of obser.	17	119	145	83		
	Centimeters	125.75 (?)	125.67	126.40	127.62		
Ten	No. of obser.		50	151	194	67	
	Centimeters		129.00	130.27	131.45	134.80	
Eleven	No. of obser.		29	90	187	176	59
	Centimeters		131.12	131.70	134.07	137.06	137.50

[1] *Proceedings of the Nebraska Academy of Sciences*, November, 1898.

HEIGHT

GIRLS

Age	Number of observations and unit of measure	Grade I	Grade II	Grade III	Grade IV	Grade V	Grade VI
Eight	No. of obser.	95	232	79			
	Centimeters	118.00	123.16	125.12			
Nine [1]	No. of obser.						
	Centimeters						
Ten	No. of obser.		31	108	203	72	
	Centimeters		128.75	129.11	131.71	132.92	
Eleven	No. of obser.			53	145	134	58
	Centimeters			132.25	134.22	135.83	137.50

WEIGHT

BOYS

Eight	No. of obser.	137	245	83			
	Pounds	48.62	51.26	53.80			
Nine	No. of obser.	17	119	145	83		
	Pounds	55.10 (?)	54.75	55.50	58.15		
Ten	No. of obser.		50	151	194	67	
	Pounds		57.25	59.60	90.30	62.86	
Eleven	No. of obser.		29	90	187	176	59
	Pounds		61.00	62.60	64.90	67.10	67.00

GIRLS

Eight	No. of obser.	95	232	79			
	Pounds	46.76	49.29	52.22			
Nine	No. of obser.	11	78	121	47		
	Pounds	52.00 (?)	51.60	55.22	56.88		
Ten	No. of obser.		31	108	203	72	
	Pounds		57.58	58.62	59.42	62.00	
Eleven	No. of obser.			53	145	134	58
	Pounds			63.80	62.56	66.00	68.56

No stress can be laid upon exceptions found in the above tables, since the number in each case is too small to warrant the calculation of an accurate mean.

And not only is it true that children of better physique are more advanced in school grades, but as a rule the percentage of their class standing increases with the advance in school grades; *e. g.*, the percentages for boys of nine years averaged by grades are: first, 82; second, 83; third, 84; and fourth, 89. This rule holds as far as the calculation of results has been made, viz., for children eight, nine, and ten years of age. Wherever there is an occasional falling off in percentage it occurs usually in the highest grades for the age, especially in the fourth grade. From this uniformity in the nature of the exceptions the general inference may be drawn that the children in the highest grades were pushed into them

[1] Not yet calculated.

too rapidly. An added reason for the falling off of percentage in the fourth grade in Omaha schools may be that the children are given an entirely different line of subject-matter as they enter this grade.[1]

Omaha girls surpass the boys in weight during the twelfth, thirteenth, fourteenth, and fifteenth years; in height during the ninth, tenth, eleventh, twelfth, thirteenth, and fourteenth years. The superiority of girls during the ninth, tenth, and eleventh years, however, is not very marked.

The climate of Nebraska is said to induce nervousness. This tends to decrease weight. Perhaps the nervousness of the climate affects the weight of growing boys more than that of girls; but whatever the disturbing cause, the results from Omaha for the most part sustain the previous conclusions as to prepuberal acceleration of growth first pointed out by Dr. Bowditch.[2]

In chest expansion Nebraska children are prevailingly larger than St. Louis children. In Lincoln some remarkable cases of chest expansion were discovered. One boy of fifteen years in the Bancroft School measured five and seven eighths inches of expansion, which is more than any man in the University of Nebraska possessed. Only one man boasts an expansion of five inches, and that not mainly because of his size, but rather from great flexibility of the thorax. Several boys in the Bancroft School had three inches or over of chest expansion coupled with a prevailingly large lung capacity. Out of six of our largest and strongest men in the university, ranging from five feet ten inches to six feet six inches, and with a lung capacity of 345 cubic inches, the greatest chest expansion was between six and seven centimeters, or less than three inches.

In Omaha also there were several cases of very remarkable chest expansion. Upon the authority of Dr. Towne, who measured almost the whole ten thousand children as to this physical quality, I am able to state that there were a few cases in Omaha ranging from twelve to fifteen centimeters. Among children of a medium age these cases of remarkable expansion are most frequent. All these observations appear to indicate that adults, especially large-boned individuals, usually have little flexibility of the thorax, and they point to a period during adolescence when flexibility is greater than in later life.

The smaller weight, broader thorax, and greater lung capacity of

[1] It is worthy of note, also, that the children now in the fourth grade in Omaha are the first kindergarten-trained children to enter the fourth grade. In response to an inquiry with reference to this matter, Dr. Towne, of Omaha, pointed out that possibly for this reason they are less mature, or, in his words, "their childhood has been prolonged."

[2] In support of the statement that Nebraska has a nervous climate, it may be interesting to note that the normal pulse rate for the young men of the state, as based upon 600 observations in the university, was found to be eighty and a fraction. This rate is eight to ten beats higher than the normal for the East The pulse rate of Nebraska football men in 1898 was 76.75; of the track men, 80.5; while the rate for athletic men in the East is said to be about 60.

Nebraska university students, men and women, the superior height of the men of the state, as well as some other, minor differences in development, point to a distinct departure from the eastern student type. The fact that these observations for adults agree in the main with those already made for Nebraska children indicates that the trend of development toward a certain fixed type is constant for the state during the whole period of growth.

Every state ought to be thoroly organized for the promotion of an adequate interest in the physique of its student population, from the kindergarten to the university. Physical facts need restatement in a terse, concrete form to teachers and pupils. There is sufficient general realization of the value of exercise for the promotion of health, but there is no really practical and prevailing system of bringing about a reform. Our sympathy with the correction of physical abuses is lost sight of in the intellectual work which has absorbed our lives.

The supporters of physical training are largely those who have learned by a bitter experience in college or out in life that it takes vitality to do a man's work in the world. The masses of people who do not understand the meaning of weakness, atrophy, and low vitality are just as sympathetic with physical-education reform as they know how to be. They understand that physical evils exist, and that in the abstract there is some remedy for them; but it rarely occurs to them that the state ought to apply the remedy. These people can be aroused to a live interest only by the presentation of concrete facts from their own immediate surroundings. Given this vital interest, and the whole matter of physical education solves itself. The need of gymnasia, physical instructors, time for exercise, character of exercise, etc., will be met. Nothing excites interest like local facts.

1. The best thing, then, to stir up an interest thruout a state is to examine the children of the state. The result of this investigation will be an interest aroused in students, parents, teachers, and school boards. Children learn that they have a body to be developed; become intelligently interested in care of health. Parents are reminded that the strength of their children is their immediate and most vital care. Teachers understand that their pupils are not alike in physical capacity; that some must be pushed and some retarded, or rather their interest diverted into physical development for their own ultimate good. They learn that to push the child out of one grade into another is not the ultimate end of good service; that certain children who appear dull and lifeless at times are so from pathological reasons rather than psychological; that such children are not stubborn, but physically abnormal. A vast amount of friction between teacher and pupil which now passes under the name of a necessary evil might be avoided by the teacher's understanding more of physiological psychology and the laws of growth and development.

Finally, the school boards which are prevailed upon to undertake such an investigation are interested individually and collectively by that which they are undertaking thru delegated power, and never fail to show their interest by the presence and active assistance of some of their number.

2. The second thing to do is to bring conclusions into suitable shape for presentation before the state medical association, the academy of sciences, or other scientific bodies; before the state teachers' association; before school boards of the cities interested; and to present them also to the teachers and to the pupils of the schools which furnished the data.

3. The third thing to do is to get some systematic physical training into the schools, and with it a system of annual physical examination, simple at first, but becomig more and more thoro as the services of able medical men become available for examinations and prescription of exercise. Then we shall have provided for our own flesh and blood as carefully as we have for the young criminals of the country in our reform schools, and have given them an equal chance of becoming strong, able-bodied citizens.

The best method of securing the co-operation necessary to the carrying out of such an investigation of the growth and development of children is thru the organization of a local physical-education society. Co-operation means strength.

The matter of measurement of children is very much more expeditious than is the calculation of results. Ten afternoons of from two to three hours each were necessary for the measurement of 2,500 in Lincoln schools, with two sets of instruments, taking two rooms at a time. With one set of instruments and corps of observers, 10,000 were examined in Omaha within four weeks. With the proper organization of forces, these measurements can be taken accurately at the rate of two and even three children each minute. In Lincoln over three hundred children were measured thru two sets of instruments working in separate rooms within two hours.

It is not supposed that the figures given herewith are final for Nebraska. The purpose of this first general examination is to provide an approximate standard of the normal development for each age and sex. Nebraska will have a full series of anthropometric tables for use in schools as soon as the calculations can be completed, probably before the end of this year. After physical examinations have been introduced for a period of several years thruout the state, and a hundred thousand or more individuals have been examined from various cities and schools, it will be time to anticipate obtaining conclusions of more absolute accuracy. Until such a time we may be content to use charts based upon the first examination of the children of our own section, or else procure them from some state where the physical conditions are practically the same as in our own state.

Few cities, counties, or states are already so thoroly aroused to the need of the prevention of disease, and of the promotion of growth and development of children, that they are ready to inaugurate outright a well-developed system of physical examination and of physical training. They need some preliminary steps of encouragement to action. It has been the aim of this paper simply to offer these preliminary steps. This plan of local investigation of need never yet failed to arouse an ever-increasing increment of interest in all who came in touch with it.

Additional scientific results of permanent value to anthropologists will accrue from such widespread investigation among the states, and will form a sounder basis for future work; and the young medics who are now kicking up their heels in offices all over the country, waiting to find or to make patients, can secure more profitable occupation in practicing the prevention of disease as medical examiners and physical directors in our public schools. The trend of modern medicine theoretically is to preventive medicine; why not make it practical by putting it into force during the time of life when the whole organism is plastic and complete development is possible? By exercise properly directed more can be done for the future physical strength of the man in one year of training before the university age than in two or three years after his entrance upon academic study.

Besides, the development which is obtained later in life is not so permanent.[1]

Such cities as Boston, St. Louis, and others, in which physical education has received most attention, have demonstrated by results the great value of corrective work upon the development of children. They have demonstrated also the value of physical measurements as a guide to practical methods in the promotion of this growth and development. The immense stimulus which their investigations have given to physical educators thruout the country is not a matter whose influence they have measured or perhaps counted upon in the inception of their work, but they have counted upon a definite influence upon the local interest in physical training in these cities, and they are still prosecuting some form of investigation for scientific purposes which helps to stimulate local gymnastic and athletic interest.

It is for this practical, pedagogic value I recommend the first general investigation, and afterward observations for purely scientific purposes, when more accurate results have become possible thru the employment of medical experts upon our public-school forces. What we want now is

[1] Men often work up strong arms or legs, or some other part of the body which has been weak, by the use of gymnastics while in college, but after they get out into business or professional life and drop this form of exercise they are surprised to find that the development upon which they were wont to pride themselves has gone with the cessation of the exercise; not so with the brawn of the country-bred boy or with the gymnasium-bred city youth; at least not as noticeably so, altho lack of exercise does tend to produce decline in strength in the strongest.

some practical plan by which the public attention may be directed toward the necessity of systematic physical training for public schools. The same systematic physical examination and physical training which exists in our colleges and universities must be extended to preparatory and public schools. The best initial step leading up to this ultimate end will be that outlined above.

PLAY INTERESTS OF CHILDREN

BY WILL S. MONROE, STATE NORMAL SCHOOL, WESTFIELD, MASS.

Perhaps no one factor in the life of the young child is so conducive to healthy development as play activity. As Professor Preyer has forcibly stated it:

> A man does not learn through any kind of instruction or study in later life anything like so much as the child learns in the first four years of his careless existence through the perceptions and ideas gained in his play. What seems to adults unworthy of the slightest attention in childish play is to the child himself of the highest significance, because it has the charm of novelty.

The utility of children's play, from an intellectual point of view, is likely to be overlooked, but in what other form of activity does one find such diversity and virility of mental forces? As Professor Preyer remarks:

> How much there is of combination, of putting together; how much of analyzing or taking to pieces of tangible things; how much of construction and destruction; how much of investigation and persistent penetration, accompanied with great muscular effort. . . . Play makes the child happy. Work makes happy the learned man; and by such a parallel there is no expressed depreciation of the value of the activity of the investigator and thinker, the discoverer and inventor. We simply put a higher estimate on the activity of the playing child, who, in his primitive fashion, likewise discovers and invents.

With a view to ascertaining the games which children like best to play, the following test was given to 978 boys and 1,072 girls between the ages of seven and sixteen years: "What games do you like best to play in summer, and why?" Three hundred and thirty-two favorite games were mentioned, fifty-four of which, being named but once, were regarded as exceptional rather than traditional, and were not collated. The remaining 278 games were grouped under nine rubrics, and constituted the following percentages of all the games mentioned:

1. Ball games	32 per cent.	6. Love games	3 per cent.
2. Chase games	31 per cent.	7. Guessing games	1½ per cent.
3. Motion games	10 per cent.	8. Animal games	½ per cent.
4. Occupation games	5 per cent.	9. Miscellaneous (unclassified)	14 per cent.
5. Parlor games	3 per cent.		

All games played with balls have been grouped under the rubric ball games. The group includes 13 per cent. of all the games mentioned, and was represented by 65 per cent. of boys and 35 per cent. of girls. Baseball was the favorite ball game; it was preferred by 70 per cent. of the boys, and reached its maximum at eleven and twelve years. Football was a favorite game with 32 per cent. of the boys, but it had few advocates among the younger children, and reached its maximum at the age of fourteen years. Handball and basketball each had a few advocates among the boys. Croquet is a favorite game with 20 per cent. of the boys and 44 per cent. of the girls. With both sexes it reaches the height of its popularity at from eleven to thirteen years. Marbles are mentioned as favorite games by 28 per cent. of the boys and 4 per cent. of the girls. This game is rarely mentioned after the age of thirteen years. Hopscotch is the game liked best by 10 per cent. of the girls and 1 per cent. of the boys. Among the other ball games less frequently mentioned are "duck-on-the-rock" and "tennis" by the boys, and "bean-bag" and "tennis" by the girls.

Chase games, in which the element of vigorous physical exercise is pronounced, constituted 31 per cent. of the favorite games. "Hide-and-seek" ranked first, with 40 per cent. of boys and 60 per cent. of girls. It is more often selected than any other game, and reaches its maximum with the boys of twelve years and the girls of thirteen. "Tag" ranks second in popularity among the games of chase. It is mentioned by 13 per cent. of the boys and 50 per cent. of the girls; and "blind-man's-buff" is third, with 5 per cent. of the boys and 12 per cent. of the girls. Here, as Professor Groos notes, instinct is more conspicuous than in other forms of play, since by means of it the young practice sportively those movements which will be used in earnest later on. Many of the chase games partake of hunting and combative characteristics, and are only explicable, as Professor James points out, as an aboriginal impulse initiated by immediate and overwhelming tendencies to muscular discharge. "If evolution and the survival of the fittest be true at all," he says, "the destruction of prey and human rivals *must* have been among the most important of man's primitive functions; the fighting and the chasing instincts must have become ingrained." Some of them, too, are clearly derived from more serious practices of earlier times. Tylor says in this connection that things which occupy an important place in the life history of primitive men become the playthings of children in a period of civilization. The bow and arrow, for example, which constituted the weapons of mankind at an early stage of its existence, have outlived the serious purposes for which they were devised and have become toys in the hands of civilized children.

The keen enjoyment which rhythm occasions is the basis of preference in the motion games. Such games include rounds and numerous verbal

repetitions; and if one is to judge by the preferences of these children — 27 per cent. of boys and 73 per cent. of girls — they appeal especially to the feminine play instinct. "Ring-around-the-rosey" and "farmer-in-the-dell" are the two favorite games of this group. Most of the motion games are accompanied with music, and in some there are certain dance variations. Such games are favored almost entirely by girls under eleven years of age. Miss Fanny B. Gates, in her excelleut study of the musical interest of children,[1] remarks that the sense of rhythm is essentially a sense of movement and suggests the early connection of music and dancing. "Anyone," as she says, "who watches himself or other people as they listen to music will perceive that the pleasure is often enhanced by actual rhythmical movements. Even if no actual movement occurs, the tendency is there."

The group of occupation games is not as large as one might reasonably expect; but it should be recalled that not a few of the games of chase and the motion games imitate adult activities, and that many children play at housekeeping and storekeeping without thinking of them as games; and three-fourths of such preferences are by children under eleven years of age. Keeping house, store, and school are the forms of occupations oftenest mentioned. Among the children of the American Indians most of the games are sportive imitations of occupations which they will carry on in earnest a few years later. A Sioux Indian in writing his recollections of wild life as a boy says:

> Our sports were molded by the life and customs of our people — indeed, we practiced only what we were expected to do when grown. Our games were feats with the bow and arrow, foot and pony races, wrestling, swimming, and imitations of the customs and habits of our fathers. We had sham fights with mud balls and willow wands; we played lacrosse, made war upon bees, shot winter arrows, and coasted upon the ribs of animals and buffalo robes.

Social games, played indoors, are mentioned as favorites by but 3 per cent. of the whole number of children tested, of which 49 per cent. are boys and 51 per cent. girls, most of whom are from twelve to sixteen years of age. Checkers, chess, dominoes, and parchesi lead with the boys, and cards with the girls. As the test called for favorite summer games, it is not at all surprising that the number suggesting such games should be so small, since the games of this group are essentially forms of amusement in the winter.

When it is recalled that in America boys and girls always attend school together, surprise will be felt at the small number of children selecting love games as favorites. Is it because the sexes become so accustomed to one another that coquetry becomes too commonplace to find a place in their games? Many of the love games have pretty rounds and rhythmical dance accompaniments, and because of their jingle and motion would naturally appeal to young children. But less than 3 per

[1] *Journal of Pedagogy* (Syracuse), October, 1898, Vol. XI, pp. 265–84.

cent. of the whole number of children tested mention love games, and the feminine preponderance of those who do make such selections is most striking, 87 per cent. of the number being girls and but 13 per cent. boys. Those who select love games are at the dawn of adolescence. "Drop-the-handkerchief" and "post-office" are the two favorites of this group.

Guessing and animal games include respectively 1½ per cent. and ½ per cent. of the children tested, the former being mentioned almost entirely by the girls and the latter by the boys. Guessing introduces the element of chance which among primitive people was associated with the art of divination, and such games may be regarded as survivals of a branch of primitive philosophy. The animal games are purely imitative in character, and both the actions and the sounds of the animals are imitated. Several of the animal games are also games of chase.

Very naturally the children experienced much difficulty in stating the reasons why they preferred certain games. Twenty-four per cent. of the boys and over 30 per cent. of the girls gave no reasons. Few of the children of seven or eight years stated any reasons for their selections; after thirteen years most of the children gave reasons for their choice. This would hint that thirteen years is the age when children begin critically to examine their evidence, and when the reasoning power of the mind appears as a dominant factor in the mental life of the child. Sex differences are much less in the reasons than in the choice of the games. Fifty per cent. of those who give reasons say that games give them pleasure. That the game produces agreeable states — whatever they may be — seems to these children a good and sufficient reason for liking it. Certainly in many instances, as Professor Groos has suggested, pleasure is a cause. Fifteen per cent. definitely say that the pleasure comes from movement exercise. Some of the children state that they like to play because of the training in bodily functions, and the consequent pleasure that musculur agility and co-ordination will give them. Seven per cent. of the children base their game preferences on being in the open air. Out-of-door play gives them a sense of freedom and lack of restraint which is common to adolescents. Six per cent. of the reasons center about emulation, gain, success. These children select games in which their own individual skill triumphs — games which accord them the pleasure of enjoying their little successes. Five per cent. of the children select games in which they can repeat the actions of grown people. Imatation and the conscious pleasure of self-delusion mediate the selections of this group. Four per cent. of the children who give reasons say that they like best the games that may be played in common with others; they give the desire for companionship as the basis of their choice; and 4 per cent. select games that are exciting. Since the test called for summer

games, 3 per cent. of the children make selections of games that can be played in summer and cannot be played in winter. Three per cent. consider certain games more healthful than others, and 3 per cent. want games that are not rough. This last group represents almost entirely girls, since many of the boys distinctly state that they prefer vigorous, active, rough games. The study suggests the preferences of children in play interests, and the question naturally arises: What social and educational forces are brought to bear on the child during the period when play interests are deepest?

In some cities and towns in America games are recognized as a part of the regular school instruction. A most carefully worked out course of study of games, running thru the nine years of the elementary school, has been prepared by Mr. George E. Johnson, superintendent of public schools at Andover, Mass. In Grade 1 (for children of six years), for example, there are (1) simple rounds for the purpose of removing shyness, developing sociability, and gaining the attention of all to a common interest; (2) games which involve the recalling of the names of animals as an aid to memory; (3) observation and indentifying games to cultivate the perceptive powers; (4) anagrams, matching letters, and spelling matches to quicken interests in reading and spelling; (5) turning indicators with numbers, playing store, estimating distances, and mathematical puzzles as aids in arithmetic; (6) playing in sand, making caves, roads, and sailing boats, as well as such games as "follow-the-leader," because of their educational value in geographic instruction; (7) historical tableaux, literary whist, and theatricals as incidental aids in the study of biography and history; and (8) a long list of games especially adapted for purposes of physical training — return ball for the development of arms and hands; feather games (keeping a feather in the air), squat-tag, and racing for chest development; balloon ball, snow fights, and the London bridge (tug-of-war) for back, waist, and abdominal muscles; and cross-tag, jumping, and marches for the legs. In some of these games all the children take part; such games are played on cool days. In others only two or three children exercise at a time; these are played on warm days. A third kind of games is played with apparatus, and these usually take place in the schoolrooms. Among the results noted in these schools since definitely prescribed games have become a part of the school course are (1) better power of conversation on the part of the young children; (2) more lively and sympathetic social interests in the school; (3) evidences of awakened intelligence on the part of the young children; and (4) fatigue less apparent toward the close of the sessions.

Miss Rebecca Stoneroad, director of physical training in the public schools of Washington, D. C., has also made a commendable beginning in the correlation of play interests with school work. In her *Gymnastic*

Stories and Plays for Primary Schools (Boston: D. C. Heath & Co., 1898) she outlines a series of physical exercises along play lines for the first two years of school. Speaking of her efforts to make use of play as a factor in body-training she says:

> We have endeavored to take advantage of the play instinct of childhood, and, adapting it to our own ends, make it a means of education. This becomes regulated play — play directed toward educational ends. . . . . In these lessons the children use their imagination, and act out a connected and consistent story in a series of body movements. Many of these have been within their experience outside of school, yet they make good gymnastic exercises, bringing into action many muscles of the body. Pretending to do in school that which is seen or done out of it makes children happy in the doing. In these natural movements of childhood opportunity is given for that co-ordination of muscles so highly desirable in all physical exercises for the young.

A secondary aspect of this study was the large number of counting-out rhymes reported by the children as adjuncts of their favorite games. Practically none of the children seem to be without them; and in some instances individual children had as many as seventeen of these formulas for use in their games. In all, 183 different counting-out rhymes were reported; but all but fifty-four proved to be variations of a few pleasing or much-used jingles. The one oftenest mentioned — being given by 92 per cent. of the children — is unmeaning and inelegant:

> Ena, mena, mina, mo,
> Catch a nigger by the toe;
> If he hollers, let him go,
> Ena, mena, mina, mo.

The second in point of popularity — being given by 86 per cent. of the children — is:

> One, two, three, four, five, six, seven,
> All good children go to heaven.

These unmeaning and mysterious formulas serve a twofold purpose in the child's play activities: (1) They determine who shall take the undesirable part in a game — a species of casting lots, but differing only in the method of execution. As these Massachusetts children say, these counting-out rhymes enable them to determine who shall be "it." This use of "it" is purely technical and has distinct meaning in the play vocabulary of the child. The French equivalent is *l'être*, and the German expression *sein daran* and *sein daraus*. (2) They are used for purposes of divination: some of them foretell the life duration of the child; others, the occupation of prospective husbands, probable number of children, etc. Bolton is of the opinion that these counting-out rhymes are survivals of the practice of sorcery; that the spoken charms were originally used to enforce priestly power; and that children engaged in counting-out for games are repeating in innocent ignorance the practices and language of a sorcerer of a dark age.

Counting-out rhymes are apparently universal features of children's

plays; and, altho they occasionally undergo changes, being transmitted from one generation of childhood to another by oral repetition, the marvel is that they should linger at all with such apparent purity. This persistence is possible only thru a conservatism of children which is as pronounced as it is unexpected. In most of the matters which pertain to the life of children they are reformers of the most aggressive type, and quite oblivious of the traditions and limitations of their environment. But in all that pertains to their play interests they are conservative to the core. The formulas of plays are clung to with gospel tenacity; and the children themselves are the most displeased when the canons of games are irreligiously violated. Because of this insistence, this vein of juvenile conservatism, children's play interests and activities —their toys and games—are the oldest things in the world, linking the child thru his play-life to the mental life of savages and barbarians.

HOW MAY FATIGUE IN THE SCHOOLROOM BE REDUCED TO THE MINIMUM?

BY DR. H. E. KRATZ, SUPERINTENDENT OF SCHOOLS, SIOUX CITY, IA.

Mosso, an eminent authority on fatigue, states that he has made the difficult ascent of Mt. Blanc several times, and observed the sublime scenery that greets the eye of the traveler, but that he can remember nothing of the magnificent view from the mountain's summit, because his fatigue so greatly lessened his mental ability. If a well-trained, mature mind like Mosso's fails to carry away lasting impressions from scenes so grand, so awe-inspiring, so profoundly impressive, so powerfully appealing to the emotions, as those gained from Mt. Blanc, because fatigue has laid its numbing hand upon his powers of observation and perception, what can the untrained, immature mind of the child be expected to carry away from his usually dull routine of daily work in the schoolroom, when fatigue has laid its numbing hand upon his weak powers of observation and perception? Has not this same experience of Mosso's been paralleled in the instruction of even bright pupils, and teacher and pupils saddened and discouraged because, after carefully and laboriously climbing to the mountain top of some difficult topic, from which a glorious view could be caught, fatigue so dulled the powers of perception that practically nothing of permanent value was carried away? Such experiences are only too common, and, besides being depressing, leave the pupil in a discouraged frame of mind, with confidence in self shaken and with less desire to make the ascent again.

May not this be, in part at least, the explanation why so many pupils lose interest in their school work, develop a positive distaste for it, fall behind in their work, and are classed with dullards, so-called? Surely, the normal mind of the child possesses as vigorous an appetite for mental pabulum as his stomach does for physical pabulum. Why do so many turn away from the *cuisine* of the school? The fault lies, not in the nature of the child's mind, but in the way and in the time in which it is served.

The cry of overwork in our schools is frequently heard. It is a matter of supreme moment whether or not our children are in danger of over-pressure. Fatigue is nature's kind warning against overpressure and overexertion. We need constantly to be on the alert to discover whether or not the requirements of the schoolroom are too heavy, whether the hours of work are too many, whether the study periods are too long, whether the rest periods are too infrequent, whether any change can be made by which the maximum mental efficiency can be secured with a minimum expenditure of each child's energy. It should be constantly borne in mind that what a child accomplishes or masters depends not so much on how hard or how long he works as it does upon the fact that he is working at the maximum of his power. Ten minutes of concentrated, vigorous effort, when the mind is fresh, is worth ten times ten minutes of dawdling, whether the dawdling be caused by fatigue or laziness. Time is no measure of progress in the schoolroom.

Ribot says: "Fatigue in every shape is fatal to memory." Every teacher, therefore, should be familiar with the indications of fatigue, with the conditions which most rapidly induce it, and with the means that may be employed to avoid, to reduce, or to overcome it, so that the maximum of effort may be attained by the minimum expenditure of energy. It is said that he who causes two blades of grass to spring up where only one was growing is a public benefactor. But what shall we term him who points out how to increase mental efficiency? What honor shall we bestow upon him who can so direct us that we can bring down with us the glorious views from the mountain top, rather than be baffled and lose our grip upon them thru the benumbing effect of fatigue?

It was my privilege, more than two years ago, to state before the Department of Superintendence of this association that fatigue furnished "important indications, which, if carefully studied, will give the right ordering of the daily work of the schoolroom and secure the largest degree of mental efficiency with the least loss of the child's energy. This problem has not yet been fully worked out, and we should earnestly address ourselves to its solution." It may be said, after the lapse of more than two years, that this problem has not yet been fully worked out, altho progress has been made.

Dr. Hodge has demonstrated that brain work exhausts the nerve cells,

causing them to shrink, and that rest is needed for their recovery. Mosso concludes that such exhaustion is due, in great part, to the formation of toxic products thru nervous and muscular action. These poisonous products distributed by the blood chiefly induce fatigue. Severe and long-continued activity leads to an accumulation of poisonous products in the blood. These cause acidity of the blood, which in turn lends a temporary acidity to the disposition. This irritability is one of the familiar signs of fatigue. Other indications are wandering, lusterless eyes, jaded expression, asymmetry of posture, twitching of muscles of the face and of fingers, week balance of hand, abnormal color of skin, frequency of errors, and lack of the usual mental grasp.

But how may fatigue in the schoolroom be reduced to the minimum? is the important question. We concede in our question that it cannot be entirely overcome; that we must reckon with it, and endeavor to reduce it to the minimum where it will clog instruction as little as possible.

This paper cannot take up the subjects of good health, nutritious foods, proper exercise, etc., altho each of these contributes in no small degree to that fresh, vigorous condition of mind and body which is so essential for the attainment of the maximum of mental efficiency. Nor can it more than point out that much of inattention, that source of incalculable loss in the schoolroom, is often due to overeating, impoverishment, vitiated and overheated atmosphere, misfits in desks, and many other causes whose remedies are to some extent within the grasp of the teacher.

Our psychologists tell us that with the normal pupil mental fatigue from school work is quickly induced and also quickly passes away. Mental efficiency, or the increments of skill gained thru mental training, is much more permanent in its character, and is not soon lost. If this be true, in order to attain the highest possible maximum of mental efficiency, with the greatest economy of effort, provide working periods with more frequent rest periods, and thus secure, thru this power of the mind to recuperate rapidly, an almost continuous high state of mental vigor. That which has prevented us in the past from injecting more freely these rest periods into the work periods has been the fear that during such interruptions pupils would lose all the advantage gained. But that fear, according to this statement of our friends, the psychologists, is not well founded. The mind, instead of being, as we supposed, like the old-fashioned sensitized plate of the photographer, which required a long exposure, is, after all, more like the highly sensitized plate of the snap-shot camera. Not long exposure, but right conditions, such as proper foundations, close attention, profound interest — these determine the vividness of the mental picture, its permanency, and the degree of strength gained. We need, especially in the lower grades, to bring in these more frequent rest or exercise periods, believing that the increments of power gained from mental activity will not be dissipated thru such slight

interruptions, and that efficiency of public-school work will be greatly increased as well as relieved of much of its present drudgery.

Change is rest. Presumably the psychological explanation lies in the fact that the brain has various sense centers, to which are referred appropriate stimuli. Weariness, therefore, in the sense of sight can be partially relieved by exercises which appeal largely to the ear or the use of the hand. The daily program should be so arranged as to bring out the strongest possible contrasts and, for the lower grades, frequent changes in subjects. Music, drawing, and physical culture should be sandwiched in between the more difficult studies.

Not simply should strong contrasts be sought in arranging the daily program, but there should be careful study made so as to arrange subjects with reference to the hours when each can be pursued to best advantage. Professor Seeley, from memory tests made by Dr. Krohn, concludes that, whatever subject is taken first in the morning, the average retentive power of the children reaches 89 per cent. This, therefore, is the best working period of the day, and presumably the period for arithmetic. The second-best working period he places from 3 to 4 in the afternoon, and, with history as the subject, finds the retentive power of the children is only 3 per cent. less than for the morning hour. Common observation, however, will scarcely sustain this conclusion. The next-best period is assigned to the time from 1 to 2 : 30, and the poorest period from 11 to 12. Under the best possible arrangement of recitation periods the greatest loss at any one period is 21 per cent., while under the arrangement of the average school program the loss is 38 per cent., or 17 per cent. greater. The average loss under a poorly arranged program is 11 per cent. greater than under the best arrangement. Whether we accept these results as strictly accurate or not, it certainly remains a highly important fact that much can be gained toward relieving the fatigue of the schoolroom by a wise arrangement of the daily program with reference to contrasts in subjects and their best adaptation to the hours of work.

Pupils waste an enormous amount of energy in their misguided efforts to master a subject. The need of training pupils how to study, how to center every energy upon the task in hand, is not yet sufficiently appreciated by teachers. Tests in the recitation are all directed to ascertaining how much the pupil knows of the subject, and the more vital process of how he gained his knowledge is ignored. Studying is a great art, and its mastery, or the failure to master it, is fraught with momentous consequences to the pupil. There are those right beginnings which lead on to conscious power and mastery, and there are those misguided efforts which lead to weariness and defeat. The teacher of today must be keen enough to discover what bad habits of study are mocking this or that earnest pupil, and making his school life drudgery instead of an inspiration ; and, when discovered, must be able to train into a better use of his mental powers.

The study of interest — how to utilize it more fully in school work — has in the last decade banished much of the weariness and drudgery from the schoolroom, and its advantages and helpfulness in this direction are yet far from being exhausted. The reason why interest is such an important factor in relieving from fatigue lies in the well-known fact that the greater the interest in a subject, the less the effort of will to hold the attention to that subject. The conscious exercise of will is always fatiguing, and especially so when the subject under consideration is distasteful. The potency of interest in relieving from drudgery lies in the fact that, even concerning subjects which at first were distasteful, "we may," to quote the Herbartians, "build up such a powerful apperception mass that any fact connected with that mass will at once attract our attention, quite irrespective of our will." Under the wise teacher's management, therefore, every subject in the school curriculum can eventually be included within the charmed circle of the pupil's interests.

Why is fatigue induced so much sooner when the work is distasteful? We have already intimated that it is due to the greater exercise of will which is required to hold the wavering attention. But it seems that another characteristic should be pointed out. Where distaste exists an attitude of antagonism springs up. This feeling of dislike seeks to express itself in some outward form. To repress it requires great effort. Altho outwardly the pupil may seem composed, there is a deep inward struggle. The teacher, unless some bodily expression be given to it, remains ignorant of it, and is not conscious of the immense expenditure of mental, even physical, energy the child is undergoing. Let me illustrate: I press my hand against one of the walls of this room. I foolishly fear that it may fall upon me and crush me. I press with all my might against it. Every muscle in my body is tense. The cold, unfeeling wall shows no sign of yielding, but resists with equal pressure my tense muscles; and but slight evidence goes forth that I am in such an intense attitude of resistance. What a serious mistake to conclude that, because there is but little motion, there is therefore no intense struggle going on, and therefore no cause for weariness. And so in the schoolroom: when the pupil has a serious dislike for a subject of study, or for the uninteresting manner of presenting it, or a feeling of antagonism has, unfortunately, sprung up between him and his teacher, what a serious mistake to conclude that, because there is but little outward manifestation, there is therefore no severe tension or cause for weariness! These dislikes, these antagonisms, these undercurrents of feeling sap energies which should be utilized in fruitful school work.

Education, from this point of view, is to direct nervous energy into right channels and to keep it out of wrong ones. In every idea received there is a tendency toward motion aroused, which expends itself either in

nervous tension or in action. This is illustrated in mouth-watering when something luscious is seen, or in mind-reading. The child, therefore, is to be regarded as a sensitive being in which nerve currents are constantly being aroused both by external and internal stimuli. These nerve currents may or may not be under control. Some may be termed friendly and some hostile, some dominant and some defeated. To resist a terrifying sound may waste more energy than to give way to it. To prevent fidgetiness may be more exhausting than to yield to it. Fatigue and worry may so react upon each other that they become an endless circle. Here is where the skilled twentieth-century teacher, with her superior knowledge of these nervous forces, will be able to lessen this waste of energy.

Play furnishes a potent means for reducing to a minimum the fatigue of the schoolroom. The old saying, "All work and no play makes Jack a dull boy," contains an important pedagogical truth. There is nothing so rapidly recuperative for mental fatigue as spontaneous activity; and yet, on the other hand, there is nothing so helpfully educative as the self-activity engendered in play. That which has been most beneficent in the present modification of the work of the schoolroom has been the introduction of the play idea from the kindergarten. Strange that it was not introduced sooner! Every idea that enters a boy's mind is accompanied with some tendencies to motor activity. He cannot think of a ripe watermelon without a rush of saliva to his mouth and the muscles of his right hand becoming tense with the desire to grasp the luscious slice. In fact, he has not thoroly grasped any idea until it has set every possible power he possesses, both of mind and body, into sympathetic action. He must be free to learn it all over, to secure for himself as many points of contact as possible. And yet, until quite recently, Gray's churchyard silence, "when all the air a solemn stillness holds," was the supreme test of schoolroom management. What an indictment might here be entered against the strait-jacket school of yesterday!

Play, according to Dr. Fitz, is not due so much to an overflow of animal spirits, to a superabundance of strength, as held by Schiller and Spencer, as for the better preparation of life which nature designs to be realized thru it. To quote Dr. Fitz:

> Thus youth becomes more completely an apprenticeship to life, with play as the master-workman. In play the child is the unit of force; he initiates his own conditions. His limitations are self-imposed. His self-control lies in execution rather than in inhibition. He is concerned with self-expression rather than with self-repression. Play thus relates itself to the truest conception of education, the development of power, the power of the individual to act as a self-directed unit in civilization. The self-control gained by play acts immediately, strongly, and honestly in response to conditions as they are presented in life.

Some schools rely upon physical-training exercises to relieve from fatigue, but, while it may be admitted that such exercises are helpful, they

do not afford as good opportunities for mental recuperation as the more spontaneous movements in an outdoor recess. Physical-training exercises usually require close attention, and much of that same exercise of will which is the chief cause of schoolroom fatigue. The movements are liable to become perfunctory, lacking the spontaneity, the vital interest, and, in consequence, the exhilaration which outdoor play gives, and which is the best tonic for rapid recovery from mental fatigue.

I plead guilty to the charge of being one of those city superintendents who thought it wise, because of the danger from excessive exercise and exposure, but chiefly because of the moral contamination possible during the outdoor recess, to cut off such recess in the upper grades; but I have been soundly converted. I have instructed my teachers to return to the outdoor recess, and to avoid its former excesses and moral contamination, as well as securing more of its recuperative and educative influence, by participating freely in, and in part supervising, the children's games on the school ground. I hold that its educative, as well as its recuperative and its health, side is of such value that we should utilize it as an important factor in the children's education.

To sum up: Fatigue in the schoolroom may be largely decreased, if not reduced to the minimum, by more frequent use of rest periods; by arranging stronger contrasts in the daily program, as well as securing a wiser adjustment of difficult subjects to the best working hours; by patient and wise training of pupils into better habits of study; by a better utilization of the doctrine of interest; by lessening nervous tension in the schoolroom; and by wise use of play under supervision.

DEPARTMENT OF NATURAL SCIENCE INSTRUCTION

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 13, 1899

The meeting was called to order in the hall of the chamber of commerce at 3 P. M. by Charles Newell Cobb, president of the department. In the absence of the secretary, N. A. Harvey, West Superior, Wis., was elected secretary *pro tempore*.

The program presented was as follows:

President's address, "Thirty Years' Progress in Science Teaching," by Charles Newell Cobb, Albany, N. Y.

"The Status of the Fur Seal," by President David Starr Jordan of Leland Stanford Jr. University.

"The Relation of Physics to Other Subjects in the High-School Curriculum," by S. P. Meads, professor of science, High School, Oakland, Cal. This paper was discussed by Mr. Cobb, Mr. Schultz, and Mr. Tolman.

The report of the Committee on Physics and the report of the co-ordinating committee of the Department of Natural Science Instruction were read. Upon motion, the reports were received as reports of progress, and action upon them was deferred until the next day.

REPORT OF COMMITTEE ON PHYSICS

A copy of the following proposition has been presented to each member of the committee. The replies received are indicated below.

"As a member of the Physics Committee appointed to act in co-operation with the Natural Science Section of the National Educational Association, I approve the following recommendations:

"1. That, in public high schools and schools preparatory for college, physics be taught in a course occupying not less than one year of daily exercises; more than this amount of time to be taken for the work if it is begun earlier than the next to the last year of the school course.

"2. That this course of physics include a large amount of individual laboratory work, mainly quantitative, done by the pupil under the careful direction of a competent instructor and recorded by the pupil in a notebook.

"3. That such laboratory work, including the keeping of the notebook and the working out of results from laboratory observations, occupy not more than one-half of the whole time given to physics by the pupil.

"4. That the course include also instruction by text-book and lecture, with qualitative experiments by the instructor, elucidating and enforcing the laboratory work, or dealing with matters not touched upon in that work, to the end that the pupil may gain, not merely empirical knowledge, but, so far as this may be practicable, a comprehensive and connected view of the most important facts and laws in elementary physics.

"5. That college-admission requirements be so framed that a pupil who has successfully followed out such a course of physics as that here described may offer it toward satisfying such requirements. (The question whether the college should hold an examination to determine the candidate's attainments in physics is not here considered.)"

PROFESSOR CARHART, of Ann Arbor, signed the propositions as here given.

CHANCELLOR FULTON of the University of Mississippi also signed them without change.

MR. C. L. HARRINGTON, of Dr. Sachs' Collegiate Institute in New York, signed after changing the phrase "toward satisfying such requirements" in 5 to "as satisfying the requirements in physics." I have no reason to think that this change affects the meaning of the proposition as interpreted by the other members of the committee.

MR. JULIUS HOKTVET, of the East High School in Minneapolis, signed, but wrote: "I would amend 3 by stating that the laboratory work, including the keeping of the notebook, etc., occupy *at least* one-half of

the whole time given to physics by the pupil. I am coming to the belief that physics should be given at least a year and a half in the latter part of the school course."

MR. C. J. LING, of the Manual Training School in Denver, signed after changing "next to the last" in 1 to "third," and added: "I change first statement to read as above on account of those schools which have only three years in the course. I consider algebra and plane geometry of great help to a successful course in physics."

PROFESSOR E. L. NICHOLS, of Cornell, signed, but wrote: "I would suggest that section 3 be made to read that the time allotted to laboratory work should be *approximately* one-half the total time allotted to physics."

MR. E. D. PIERCE, of the Hotchkiss School, Lakeville, Conn., signed the propositions without change.

PROFESSOR SANFORD, of Leland Stanford, signed after changing the words "not more than one-half" in 3 to "at least three-fourths."

MR. EDWARD R. ROBBINS, of the Lawrenceville School, Lawrenceville, N. J., signed after striking out "the next to" of the last line in 1 and changing "toward satisfying" to "in satisfaction of" in 5.

PROFESSOR B. F. THOMAS, of Columbus, O., signed the propositions without change.

I approve all the propositions.

It now seems to me that if we change the words "not more than one-half" in 3 to "approximately one-half," as Professor Nichols suggests, we shall have a set of propositions upon which the committee is substantially agreed, altho it will not be safe to say that the agreement is complete. I doubt whether it is worth while to try to get from the committee anything more than what I have here set down.

These propositions, with Professor Nichols' amendment as just given, were read by me before the Section of Physics and Chemistry of the New York State Science Teachers' Association at Columbia University, December 30, 1898, in the course of a paper on my experience with physics as a requirement for admission to college. I did not propose or think of their adoption by that section; but they were immediately approved by the section, on the motion of Professor Hallock, of Columbia, and will doubtless appear as adopted in the report of the meeting to be printed by the state of New York.

(Signed) EDWIN H. HALL,
Harvard University.

SECOND SESSION.—FRIDAY, JULY 14

The meeting was called to order by President Cobb. The following committees were appointed:

COMMITTEE ON NOMINATIONS

J. H. Witherspoon. T. H. Kirk.
James R. Meskimons.

COMMITTEE ON RESOLUTIONS

Sidney F. Smith. C. D. Wilson.
A. P. Troth.

The following program was presented:

"The Pedagogical Content of Zoölogy," by N. A. Harvey, State Normal School, West Superior, Wis. The paper was discussed by Dr. Nicholas Murray Butler, of Columbia University, New York.

"Science in the High School," by Dr. George Mann Richardson, professor of organic chemistry, Leland Stanford Jr. University.

"Relation of High-School to College Mathematics," by Charles F. Wheelock, University of the State of New York.

The Committee on Nominations reported as follows:

For *President*—Dr. George Mann Richardson, California.
For *Vice-President*—Dr. Charles W. Dabney, Tennessee.
For *Secretary*—Charles B. Wilson, Westfield, Mass.

On motion, the secretary was instructed to cast the ballot of the department for the persons nominated.

The Committee on Resolutions reported as follows:

WHEREAS, The members of the department feel a deep and heartfelt appreciation for the reception accorded them by the citizens of Los Angeles, the chamber of commerce, and the Academy of Sciences of Southern California; therefore, be it

Resolved, That the Department of Natural Science Instruction of the National Educational Association extend a vote of thanks and good wishes to the chamber of commerce and the local committee for the use of

their assembly room, and for their assistance in making our visit and our meetings both pleasurable and instructive.

Resolved, That a vote of thanks be extended to the members of the National Educational Association who have contributed to the efficiency and popularity of our program, and to the president, vice-president, and secretary *pro tempore* for their interest and zeal in their work for science and this department.

Resolved, That a copy of these resolutions be spread upon the minutes, and copies sent to the chamber of commerce and the local committee of the Academy of Sciences.

Signed { SIDNEY F. SMITH. CHARLES B. WILSON. ALONZO B. TROTH.

On motion, the resolutions were adopted.

The president-elect was introduced, and the department adjourned.

N. A. HARVEY,
Secretary pro tempore.

PAPERS AND DISCUSSIONS

THIRTY YEARS' PROGRESS IN SCIENCE TEACHING

BY CHARLES NEWELL COBB, UNIVERSITY OF THE STATE OF NEW YORK, ALBANY, N. Y.

Thirty years of discovery and invention have done much for the progress of science, and, as a consequence, within that period our surroundings have changed to such a degree that we are likely to be oblivious to the conditions existing only three decades ago.

Less than one generation back there was no multiple nor wireless telegraphy, no stock-ticker nor telephone, no dynamo, with all the resulting applications of cheap electric energy to the multitudinous requirements of the present civilization. The Röntgen rays were unknown, and the liquefaction of the more refractory gases had not been attained. Photography was circumscribed by the limits of the wet process, and the reproduction of the photograph to millions of copies by the present improved methods was no more than a dream.

Trains of sleeping-cars and dining-cars heated by steam, lighted by electricity, and controlled by the air-brake had not been built, nor had a single line of railway yet extended its tracks of steel across the buffalo-blackened plains to join the crowded Atlantic states with the then sparsely settled Pacific coast. Only sixty-three elements were then listed, and little was known of organic chemistry, while the saving of by-products is a recent-day study.

The discoveries in biology, bacteriology, geography, and geology have been fully equaled by those in medicine, dentistry, and surgery, mining and metallurgy, and the whole category of sciences of that day. Meteorology and economic entomology may be mentioned as examples of many

new sciences developed by the present generation. So the field for science study and teaching is daily extending, and it is true now to an extent that it was never before true that it is no light task for one to overtake the present state of the world's knowledge even within narrow limits.

The material for science teaching is constantly increasing, as are also the facilities for obtaining it. The express and mail now bring it from all parts of the world, while home industries furnish it on every hand. Never before were school apparatus and school supplies so abundant, so varied, or so cheap as now.

Within the period under consideration no small degree of progress has been made in the science of teaching, while the dissemination of the knowledge of that science and the growth of the art have been both extensive and intensive. In 1870 only 53 normal schools, having 1,028 students, were reported by the United States Commissioner of Education; in 1896–97, 362 normal schools, having 67,700 students, were reported; while the entire number of those reported as taking normal courses in normal schools, universities, colleges, high schools, and academies was 89,943, an increase of 5,534 over the previous year.

Thirty years ago the teachers' institute was in its infancy, and few teachers came under its influence, while today those who attend are numbered by the ten-thousand. At that time few teachers attended summer schools of any sort, while now many annually gain either in matter or in method from this source. Then teachers' papers and magazines were few in number and had few readers; now the number of these publications is great and is increasing yearly; the amount and the character of talent engaged in their preparation is ever increasing and improving, while they number among their readers, not only nearly all teachers, but many members of school boards and trustees.

Another hopeful sign is the growing number of associations, councils, and clubs where teachers gather for professional improvement. In the state of New York there are now eleven annual educational gatherings, drawing their membership from the entire area of the state, viz.: the university convocation, including the officers and teachers of all secondary and higher institutions, which meets at Albany the last week in June; the meetings of the academic principals and of the grammar-school principals at Syracuse during the holiday week; the state teachers' association for all interested in education; the meetings of the science teachers; the music teachers; the art teachers, who hold two meetings yearly; the business teachers; the school commissioners; the city and village superintendents, and the school boards—all meeting at various times and places. In addition to these, the normal-school principals meet twice yearly, and there are county and tricounty and interlake and locality associations, councils, and clubs to the number of sixty, gathering their members from more limited geographic areas.

This general interest in the science of teaching has not been without its effect on the methods of teaching science; and improved supervision, including the administration of laws regulating the practice of medicine, surgery, dentistry, and pharmacy, has accomplished much in the same direction. As a natural result of an extended field, added material, improved methods, and more intelligent supervision may be noted the lengthening of existing science courses and the establishing of such courses where formerly there were none. President Jordan said at Champaign in 1892:

> I was early called from New York to such a chair [natural history] in a well-known college of Illinois. As professor of natural history I taught zoölogy, botany, geology, physiology, as a matter of course; physics, chemistry, mineralogy, natural theology, and political economy, also as a matter of course. With these went German, Spanish, and evidences of Christianity, because there was no one else to take them. There finally fell to me the literary work of the college — the orations, essays, declamations. I tried at one time to establish a little laboratory in chemistry, but met with a sharp rebuke from the board of trustees, who directed me to keep the students out of what was called the cabinet, for they were likely to injure the apparatus and waste the chemicals.
>
> In one institution toward which I looked the chair of natural history was found unnecessary. In the meeting of the board of trustees a member arose and said in substance: "We have just elected a professor of history. This includes all history, and the work in natural history is a part of it."

Speaking of Dr. Torrey, of Columbia College, the catalog of 1868 says: "It is his purpose to deliver lectures on botany at such hours as will not interfere with the regular studies of the undergraduates." This might seem to indicate that there were graduate students, but no mention is made of such, tho the names of all the undergraduates are given to the number of 147.

It is only thirty-two years since Columbia School of Mines sent out its first graduate. The Massachusetts Institute of Technology and Cornell University were just opening. Johns Hopkins, the University of Chicago, the University of California, and Leland Stanford Jr. were not yet. Prior to 1860 only fourteen schools and departments of science had been opened in the United States, if we are to credit the report of the Commissioner of Education.

It was about this time that an enterprising publishing firm, correctly anticipating extensive sales, arranged with a scholarly gentleman of literary taste to write a series of popular, readable text-books covering brief courses in elementary science. This series of text-books accomplished two results of general interest: first, it brought considerable sums of money into the hands of the author, a large portion of which has been used to build and equip a most admirable physical laboratory for a well-known university; and, second, it led many persons to pursue a short course in elementary science who otherwise would not have given it any attention.

At that time one-third year courses in all sciences taught in secondary schools were the rule; now year courses in the physical sciences and half-year courses in the biologic sciences and the earth sciences largely prevail. Longer and better courses have demanded better facilities, and the material equipment for successful science teaching has been so largely augmented within the last thirty years that it might almost be said to have been created within that period. In 1896–97 the value of scientific apparatus and libraries in the colleges and schools of technology of the United States amounted to nineteen and a quarter millions of dollars, or a little over twenty-six cents per capita of estimated population. Well-equipped physical, chemical, and biological laboratories are no longer uncommon in the high schools of villages and smaller cities.

In this connection mention should be made of the fact that New York, thru its university, pays one-half the cost of approved books and apparatus for its public high schools and non-sectarian academies.

Men of large wealth unite with those of more limited means in supplying the necessities of institutions of learning already founded, and in founding others, to such an extent that it scarcely attracts the attention of the general public when a college president announces at commencement that gifts have been received during the last year amounting to over a million dollars.

Turning now from things to men, it is to be observed that the number of persons teaching science exclusively has been multiplied many-fold, and with the increase in numbers has come noteworthy increased average ability to instruct. Thirty years ago a man holding a doctor's degree for work in science was rarely found teaching in a secondary school, but now there are many, and President Harper recently told some of his students that when they had completed their work for a doctor's degree they must not expect a college chair, as there are many more candidates than there are positions, but they must be well content to secure a position in a secondary school.

The most encouraging thought of all is that the factors mentioned above have so molded public opinion that the reflex influence is now felt, and, while thinking people commend the present state of science teaching, they demand in no uncertain way still further improvement.

THE RELATION OF PHYSICS TO OTHER SUBJECTS IN THE HIGH-SCHOOL CURRICULUM

BY S. P. MEADS, HEAD OF SCIENCE DEPARTMENT, OAKLAND HIGH SCHOOL, OAKLAND, CAL.

[ABRIDGED]

Ever since Cicero said in his oration for the poet Archias, "all the arts which pertain to humanity have some common bond and are held together among themselves, as it were, in a certain blood-relationship," the truth of his assertion has been growing clearer. The energetic teacher of his own subject needs to guard against an overestimation of the relative value of the branch he teaches and to keep well in mind the educational value of other subjects. A youthful and enthusiastic professor of science, as we parted recently, said to me: "Why! scientific knowledge is the only real knowledge." A few days later I heard a middle-aged professor of philosophy cap a very tall climax with the statement: "Why! philosophic knowledge is the only real knowledge." The youthful scientist and the middle-aged philosopher are blood-relatives. The exaggerated exclamations of each, being interpreted, mean that science philosophically taught and philosophy scientifically taught are wonderfully helpful in extending the field of human knowledge. I am very glad to testify to the increasing appreciation which our best teachers have of the labors of their fellows in other departments, and to the wonderful growth among instructors of a feeling of unity in educational effort.

It is very desirable that a brief grammar-school course in physics should precede the course in the high school, not so much as a preparation for high-school physics, or a preparation for chemistry and botany, as a help in composition exercises in English. This course may easily be made too discursive and may be extended too far. Metric measurements; cohesion, adhesion; the facts of osmose and diffusion; a few air-pump experiments, to give the pupil an idea of the fact that we live at the bottom of a gaseous ocean, and to teach some simple truths about the mechanical properties of gases; the plainest phenomena of magnetism, and other work of like simplicity, may be profitably taken up in the grammar school.

It is pretty well settled that high-school physics should be taught during the latter half of the high-school course. This seems to be its proper time-relationship. In our own school we take the usual course in mechanics and heat during the first senior term of five months, and electricity, light, and sound during the second senior term of five months, giving the subject one hour per day for five days in the week thruout the

year. We divide the time equally between the text-book and lecture-room on the one hand and the laboratory on the other.

A year and a half of algebra and a half-year of geometry should be a minimum requirement for beginning high-school physics, if solid and enduring work is to be done. The thought in physics is so often almost purely mathematical that without a good groundwork in algebra and geometry the lecture-room becomes a peep-show, and the laboratory directions a sort of meaningless cookbook. Before taking up the subject of light, one year's work in geometry is needed. In the preparatory algebraic work, proportions, decimals, and fractional coefficients should often be given in class-room work. The teacher of physics ought to be as much interested in the successful progress of the mathematical classes as in his own work, and, without being meddlesome or officious, should lend his assistance in every way possible to the teachers of mathematics.

Synonyms used in expressing everyday activities, if made a part of the assignments for junior English, would help us in teaching physics. We should take every opportunity to impress upon individual pupils in the lower classes the great need of being faithful both in English and in mathematics, if they would succeed in physics. Not only are we teachers of physics indebted to the teachers of those subjects for giving us well-prepared pupils, but we owe the English teachers, especially those teaching the higher grades, a debt for teaching us something whereby we may connect personality with the truths we teach.

Pictures of Newton, Faraday, Volta, Helmholtz, Galileo, and other eminent physicists now adorn the walls of physical lecture-rooms and laboratories, emphasizing not only the discoveries of each, but giving a historical view of the subject that is exceedingly valuable.

It is generally conceded that chemistry should precede physics in the course. That portion of chemistry which should be taught in high schools is vastly easier to comprehend than the laws of physics. Unfortunately, in many schools something more than half of the pupils fail to get chemistry at all, and are therefore unable to comprehend, as they ought, Voltaic cells, electrolysis, and kindred subjects.

Good preparation in drawing shows itself in the laboratory notebook, not only in improved cuts of apparatus, but in making the entire record more satisfactory. However, in many schools only a part of the pupils get any instruction in drawing after leaving the grammar school.

Physics not only receives help from other studies of the high-school curriculum, but gives help as well. It gives both information and discipline of the most practical sort. Our everyday life is touched by its laws and influenced by its forces at every turn. Its practicalities give to the pupils of English a certain fiber and strength that are very desirable. It has three graces — force, energy, and power; and the greatest of these is power. A clear conception of the word "power" in physics is necessary

to the proper conception of the word in literature. Pleasing, superbly polished literary work has its use and place, but the world is not moved by such work to heroic effort in the reformation of its abuses. A certain element of ruggedness is necessary to present motives for action that will right wrongs of long standing. Some man with lever and fulcrum must appear, who fears neither dust nor perspiration, who has a proper estimate of the resistance, and a divine confidence in the product of the force he can apply into the leverage he has given. The world meets with a great loss when a literary man's education is deficient in physics. Hundreds of our strongest expressions like "magnetic leader," "buoyant hopes," "stability of character," "an electrified audience," etc., are only half appreciated if one has not studied physics.

Physics assists zoölogy in the study of vision, hearing, nervous action, etc. Botany is indebted to it for a more complete understanding of circulation in plants and the absorption of solar energy. In fact, there is but one great whole to study. We subdivide roughly into parts for convenience, and to lessen the difficulty for the beginner, but every part is essentially related to the others, and cannot be studied completely alone without the aid of the others. Some pupils come to the high school with great prejudice against certain studies. These prejudices are often acquired with little fault on their part, on mere hearsay evidence, often from those who ought to know better. Some girls think that mathematics will do them no good. Some boys think botany is a flower study, worthy the attention of girls only. Some think Greek and Latin are the only aristocratic studies, and others think Greek and Latin are dead languages, whose dead should bury their dead. Nothing corrects these stubborn prejudices so quickly or so thoroly as for teachers to explain to pupils the true value of the study they would neglect and the interrelationship of all studies. The value of some well-taught science to the classical student is equaled only by the value of some well-taught ancient or modern language to the scientific student.

The physical laboratory is a revelation to many pupils, especially to girls. It opens a new world to them that before had not been in their thought. Especially is this the case with some bright pupils, who have underrated science, and whose minds have been exercised almost wholly along other lines. As one of these was studying her figures, made to find the gain in rigidity by placing flat beams edgewise, she came suddenly upon the truth and exclaimed, with the joy of original discovery: "That's the reason they place those things in the attic that way, isn't it?" Another, after studying the relation of the distance between the piers to the strain, said: "I shall have more respect for the men who build the long railroad bridges now."

The physics lecture-room ought often to be used for the benefit of other subjects. It should be a room with raised seats, easily darkened by

drawing double incased curtains, and its lantern and screen should be at the service of English history, art, biology, and any other subject needing a lantern demonstration or a systematic lecture occasionally. In other words, physics ought to have an intimate relationship to all other subjects taught in the high school. No course should omit it, not even the classical. No high-school pupil should graduate without studying the subject one year. Those universities which do not require it for admission in my opinion make a great mistake. The effect is highly injurious upon the secondary schools which send pupils to those universities. Finally, physics supplements other subjects in furnishing its quota of lessons for instruction in morals. As in the study of mathematics, intellectual honesty is promoted by observation of the rigid sequence of cause and effect in physics, especially by the study of the quantitative relations between the two in the laboratory. No sham activity of the dishonest student, no sleight-of-hand, no glibness of wordy effervescence can make results appear which are not. The faithful laboratory student touches on the side of nature the hem of the garment of the Infinite One who said to the seer of old: "I am that I am." "Wonderful, isn't it?" said a classical student as he gazed upon the iron filings in the field of a strong magnet and with short suspended needle studied the direction of the force lines; "I shall have a more serious conception of personal influence because of studying this magnet." I know of no more vivid illustration of the influence of a strong personality going out in all directions in beneficence or in malignity, according to the character of the personality, than the curved lines of force about a magnet, revealed by iron filings.

THE PEDAGOGICAL CONTENT OF ZOÖLOGY

BY N. A. HARVEY, STATE NORMAL SCHOOL, WEST SUPERIOR, WIS.

It is the purpose of this paper to state as clearly as possible what there is in the subject of zoölogy that renders it capable of furnishing certain fundamental disciplines that can be obtained only with difficulty in other subjects. It will be necessary to show, also, how these fundamental disciplines may be obtained, and thus indicate more or less clearly a method of teaching. In order to make the subject definite, it is proposed to limit the discussion to such zoölogy as can be taught in high schools, and to such teaching as high schools are established for giving, viz., general education, intellectual discipline, as distinguished from technical instruction in a subject that is to be followed as a business thruout life.

1. The first object sought in the subject of zoölogy is to teach the pupil to gather knowledge at first hand. First-hand knowledge is the

most important kind, altho not the greatest in amount. It is the kind of knowledge upon which most of our actions and decisions are based. A man who must gather all his knowledge at second hand, from some other person or from some other authority, is likely to become the prey of demagogs or unscrupulous leaders in society.

I said that first-hand knowledge is not the greatest in amount. Probably nine-tenths of all our knowledge must come from the reading of books; but in order to read a book intelligently, there must be an apperceiving basis of personal experience — first-hand knowledge.

This content fixes the method. It must be laboratory work, pure and simple. The use of a text-book, even for a part of the time, defeats the purpose for which zoölogy is taught. No book must stand between the pupil and the object studied.

Here, I think, we find a serious error of judgment in the report of the Committee of Ten. To recommend that a text-book be used for half of the time, or any other part of the time, devoted to a laboratory subject is like recommending that a student of Latin shall use an interlinear translation (vulgarly called a pony) on Tuesdays and Thursdays, but not on other days. The teachers of science have yet much to learn from the teachers of the classics.

Every teacher of laboratory work has found that pupils coming from the lower grades, after seven to nine years of study almost exclusively bookish, are unable to realize what the study of a *thing* is. They are able to learn what a book says, or what a teacher tells them, but to study a real thing is beyond their power.

For this purpose of training in gaining knowledge at first hand, zoölogy claims no superiority over botany, chemistry, physics, or any other subject that can be made exclusively laboratory work.

2. The second object sought, or discipline contained, in the study of zoölogy is training to gain clear ideas of the objects studied. Clear ideas are necessary for the further mental operations proposed. Clear ideas of an insect, a frog, or a crawfish cannot be obtained from reading a book. From a book we can get only an idea of the writer's idea of the object studied, and in many cases the idea filters thru the ideation of several writers, each multiplying the obscurities of the other, until our idea derived from reading resembles the object very remotely.

Here, also, zoölogy claims no superiority over other laboratory subjects. Clear-cut mental pictures constitute the aim in each.

3. The third content of the subject is training in concrete analysis. When I look at a thing part by part I am analyzing it into its elements. This is a true analysis. That it is a necessary training every teacher in a laboratory will admit. That many pupils without laboratory training, or its equivalent, do habitually look at things in their parts I would unhesitatingly deny.

Analysis is a term much used in grammar and arithmetic. The mental operation involved is similar, but concrete analysis, the examination of things in parts, is so much easier, and productive of so much more tangible results, that it is a waste of energy to give a sufficient amount of analytical training outside of a laboratory.

Zoölogy and botany are almost equal in the facility for giving training in concrete analysis. Both, I think, are somewhat superior to physics, and decidedly so to chemistry.

4. The fourth content of zoölogy is a training to use the mind in its capacity for abstraction. When I analyze a thing into its parts and regard one part alone, I am exercising the mind in its function of abstraction.

We are told that abstract terms are used very early by children, and the inference is drawn that the process is an easy one. But every teacher of algebra in a beginning class knows that to use abstract notions is a very difficult process. Any kind of abstract thought makes a difficult subject for untrained minds to read. Hence the importance I would lay upon this activity of the mind, and the training given to it in abstraction by the subject of zoölogy, properly taught.

5. The fifth content is a training of the mind in discrimination, the ability to distinguish one thing from another, and to recognize and state wherein the difference exists. The process may be best exemplified by a series of tables, actual copies of those made by pupils in the first year of high-school work, from their own observation, without suggestion or guidance, except as to form, from the teacher.

TABLE NO. 1.—DIFFERENCES OF INSECTS

	Orthoptera	Lepidoptera	Hymenoptera	Coleoptera	Hemiptera	Diptera	Neuroptera
	Grasshopper	Butterfly	Bumblebee	Beetle	Squashbug	Housefly	Dragonfly
Wings	Straight	Scaly	Membrane	Sheath	Half	Two	Nerve
Mouth parts	Biting	Sucking	Biting and lapping	Biting	Sucking & piercing	Sucking	Biting
Metamorphosis.	Direct	Indirect	Indirect	Indirect	Direct	Indirect	Direct
Larva	Nymph	Caterpillar	Grub	Grub	Nymph	Maggot	Nymph
Pupa	Active	Inactive	Inactive	Inactive	Active	Inactive	Active

TABLE NO. 2.—RESEMBLANCES OF INSECTS

Housefly Beetle Squashbug Butterfly Grasshopper Bumblebee Dragonfly	Chitinous exoskeleton Three body divisions Seventeen body segments Segmented abdomen Jointed appendages One pair of antennæ Two pairs of maxillæ Three pairs of legs Jaws move sideways Compound eyes Breathe by spiracles Double nerve cord and ganglia

TABLE NO. 4.—RESEMBLANCES OF ARTHROPODS

Grasshopper Spider Centipede Crawfish	Exoskeleton Jointed appendages White blood Jaws move sideways Double nerve cord and ganglia Specialized breathing organs

TABLE NO. 3.—DIFFERENCES OF ARTHROPODS

	Insecta Grasshopper	Arachnida Spider	Myriapoda Centipede	Crustacea Crawfish
Body divisions	Three	Two	One (differentiated)	Two
Skeleton	Chitinous	Chitinous	Chitinous	Calcareous
Antennæ	One pair	None	One pair	Two pairs
Eyes	Compound	Simple	None [1]	Compound
Breathing	Spiracles	Air gills	Spiracles	Gills
Number of legs	Three pairs	Four pairs	Thirty-one pairs [1]	Ten

It seems to me that this is a most important content of the subject. The man who discriminates well sees clearly, thinks clearly, and is thereby enabled to arrive at a valid judgment. But one who is untrained in seeing differences can never be an accurate thinker.

6. The sixth content of zoölogy is a training to see resemblances; that is, training to exercise the mind in its capacity for comparing.

TABLE NO. 5.—DIFFERENCES OF VERTEBRATES

	Mammal Rabbit	Bird Pigeon	Batrachia Frog	Fish Perch
Covering	Hair	Feathers	Naked	Scales
Appendages	Legs	Legs and wings	Legs	Fins
Breathing	Lungs	Lungs	Lungs	Gills
Heart	Four chambers	Four chambers	Three chambers	Two chambers
Aorta	Left	Right	Right and left	Branchial
Circulation	Double, complete	Double, complete	Double, incomplete	Single, complete
Blood corpuscles	Non-nucleated	Nucleated	Nucleated	Nucleated
Reproduction	Viviparous	Oviparous	Oviparous	Oviparous
Temperature	Constant	Constant	Variable	Variable
Occipital condyle	Two	One	Two	None

TABLE NO. 6.—RESEMBLANCES OF VERTEBRATES

Rabbit, Pigeon, Frog, Fish	Internal, jointed, bony skeleton
	Jaws move vertically
	Two pairs of appendages
	Red blood
	Brain and spinal cord inclosed in a separate, bony cavity
	Jointed appendages
	One pair of simple movable eyes

TABLE NO. 7.—RESEMBLANCES OF ANIMALS

Paramœcium, Sponge, Hydra, Earthworm, Starfish, Clam, Grasshopper, Rabbit	Free locomotion — generally
	Nervous activity — voluntary motion
	Food ingested in solid particles
	Exchange CO_2 for oxygen

It matters not at all for our present purpose that these tables are crude and unscientific. The only thing that does make a difference is that they are the work of the pupils from their own knowledge of the objects studied, gained at first hand.

It is rather a more difficult process to see resemblances than it is to see differences. It is rather a higher kind of mental activity. But in the ultimate analysis it is only by observing resemblances and differences that we do learn or can learn anything. Surely, then, too much importance cannot be attributed to training the mind consciously to do these things.

[1] Scolopocryptops.

Permit me here to digress for a moment, long enough to enter a protest against the practice prevalent in some schools of putting too great a proportion of time devoted to the subject upon one, or a very few, forms. This is generally done by that kind of teachers which Mr. Blatchley has denominated "microscopic specialists," who, to use the well-known aphorism of Professor Forbes, are unable to see nature until it has been boiled in corrosive sublimate, fried in paraffine, and sliced with a microtome.

We must have a sufficient number of forms to furnish abundant material for making tables of differences and resemblances. I say it without the slighest fear of successful contradiction that the chief value of botany and zoölogy, in a high-school course, comes from the fact that they are classificatory sciences. The units of classification are derived from an examination of these tables of resemblances and differences. Hence naturally follows our

7. Seventh content, the training of the mind in forming the general concept of a class or a group. The general idea is formed from the table of resemblances, and includes all the animal forms which possess the characteristics there represented. It does not matter at all that this general idea will become more and more definite, and our tables of resemblances shorter and shorter, as the number of forms studied increases.

The only thing that appeals to us now is the fact that we have here a conscious attempt to generalize, to obtain an idea of a comprehensive term that will include all the particulars.

I think everyone will admit the supreme importance of the activity of generalizing. It leads directly to the highest form of thinking, philosophy; and I have often thought that many of our great philosophers have manifested a "plentiful lack" of training in the elementary processes of generalization, such as I am proposing to give in the subject of zoölogy.

8. The eighth content of zoölogy is training in logical definition. A logical definition is one which manifests the nature of the thing defined. It always includes the genus and the differentia, or those characteristics which distinguish the object from others in the same genus. The genus should be the proximum genus. It is thus always derived from a table of differences, either expressed or understood, as shown in Table 8 on the following page.

The genus is expressed by the predicate noun, and the predicate noun always expresses the characters of the table of resemblances from which the general idea is derived.

Discursive thought involves three processes: first, the formation of the concept or the notion; second, judging; third, reasoning. It will be seen that so far the preceding exposition has dealt entirely with the first, or the notion. I lay so much stress upon the study of zoölogy because I believe the acquisition of the notion to be the most important

TABLE NO. 8.—SCALE OF ANIMAL LIFE

Paramœcium	Sponge	Hydra	Starfish	Earthworm	Clam	Grasshopper	Rabbit
Animal characteristics	=	=	=	=	=	=	=
	Many cells	=	=	=	=	=	=
		Hollow body cavity	=	=	=	=	=
			Nervous system. Separate digestive cavity	=	=	=	=
				Bilateral symmetry	=	=	=
					Specialized breeding organs	=	=
						Jointed appendages	=
							Brains and spinal cord inclosed in separate bony cavity

[See Table I.] A Lepidopter is an *insect* (genus) having scaly wings, sucking mouth parts, indirect metamorphosis, whose larva is a caterpillar, and whose pupa is inactive, etc.

step in thinking, and at the same time the most difficult to attain. It is not too much to say that all healthy minds will judge alike and reason alike, and reach the same conclusion, if they see alike.

There is constant exercise in practical judging and practical reasoning in the study of zoölogy, but other subjects deal with the formal side in a conscious manner better. Grammar deals with the proposition which is the expression of a judgment. Euclidean geometry deals with formal reasoning exclusively. It appears to me that zoölogy, grammar, either Latin or English—and I would prefer the English—and geometry are the three subjects which may be used to the greatest advantage, with the least loss of energy in training to discursive thinking.

This view of the matter was suggested to me by reading a course in logic while I was teaching zoölogy and trying to discover what there was in the subject that justified or demanded its introduction into a course of study. It seems to me that we have here a pedagogical principle of considerable value: that for teachers it is better to study dynamic mind than static mind; that it is better to make formal logic the basis of pedagogical experience than our ordinary psychology.

It is necessary to point out the importance of a method in teaching zoölogy, or any other subject. The particular discipline indicated can be obtained in learning zoölogical facts by one method. But if the facts are learned by another method, these particular disciplines may be

entirely avoided, and can never thereafter be attained by the study of this subject. While I would affirm that the disciplines I have suggested are by far the most available, they are not the only ones, and the subject may be used for an entirely different purpose.

That it is the discipline involved, and not the knowledge of particular forms acquired, which constitutes the content of the subject will be acknowledged by all when it is recognized that one class of students may study one set of animal forms and another class an entirely different set, with equal benefit.

Colleges, then, that complain of the work of high schools quite generally set up a false standard, and do an injury to the schools when they demand knowledge of particular forms as a test of efficiency, instead of facility in mental processes properly cultivated by the subject.

In all our work it is necessary to keep in mind the fact that it is the pupil that is to be taught and not the subject.

This view of zoölogy fixes its position in a high-school course. Physics and chemistry, being the laboratory subjects that are quantitative, giving a different kind of discipline, and demanding more maturity of mind, should follow the qualtitative subjects of botany and zoölogy. Physiological processes can best be studied in plants. From this fact, and from the further fact that the differences which are the bases of classification in animals are more easily observable than the differences in plants, it will be found advantageous to put zoölogy in the first year of any high-school course.

The teacher must know the content of his subject. If he does not, he is a bungler and not worth his salary, however meager that may be. But it is not necessary, nor even advisable, that the pupil should know it. The teacher knows that the objects sought are to be found in the disciplines acquired. Let the pupil feel that the object sought is a knowledge of the frog and the tadpole and the earthworm. Here, as elsewhere, the greatest good is apparently incidental.

There are many other reasons why zoölogy should be studied in high schools. But I have preferred to lay emphasis upon the indisputable propositions that will forever demand its introduction into the schools, and am willing to pass by without comment those advantages which, while often more apparent, are really of less importance than these fundamental disciplines which are of eternal consequence to the human understanding.

SCIENCE IN THE HIGH SCHOOL

BY GEORGE MANN RICHARDSON, PROFESSOR OF CHEMISTRY, LELAND STANFORD JR. UNIVERSITY, CAL.

When a man wishes to be dogmatic upon a subject, he finds it a great convenience not to know very much about it. Now, I have never been connected with the high school as a teacher, or even as a pupil; you will recognize at once, therefore, that I have certain qualifications for addressing you upon the topic "Science in the High School."

Science has won its place in the curriculum of the high school against much opposition, and under unfavorable conditions — unfavorable because of the way science was at first taught, and still is taught in some instances — on account of which the valuable mental training peculiar to science study was not obtained.

Facts about the sciences were read from text-books; definitions and classifications were committed to memory with a very hazy notion as to their true import. This unfortunate method of teaching science was in great part due to the fact that, at first, properly trained science teachers were few in number, and to a decided tendency among school authorities to thrust the science work upon some already overcrowded teacher, who had to carry the additional load as best he could. The chief result of this kind of science study upon the pupil is the blunting of his curiosity concerning the sciences, a curiosity which has become widespread, because, in their applied form, the sciences are met with on all sides, and because they have so completely revolutionized our methods of living within the last fifty years.

Whatever excuse there might have been for this method of caring for the sciences at first, there is certainly none now.

There are plenty of well-trained science teachers now to be had, and school boards that are not willing to employ such should have the courage to leave science out of their school altogether. Yet, almost every year I have known of teachers of chemistry who had never studied chemistry before they undertook to teach it, and who were making desperate efforts to keep at least one lesson ahead of their class. Under such conditions there is little to be said in favor of retaining for science a place in the high-school curriculum, and much to be said against it. Nevertheless, science has a real and very important place in our educational system.

Intelligent persons have given up the idea that natural laws will or can be changed for man's benefit, or be brought into accord with man's desires; but they recognize that the same result can be reached by changing themselves, by putting themselves in accord with natural laws. To do this it is necessary to know the laws of nature, and hence it is that the

study of the natural sciences has a very wide practical application in teaching people the methods of right living. In addition to the value of the knowledge itself, science, when properly taught, gives a peculiar kind of training, and develops a certain attitude of mind, which are very desirable for the educated man. Science deals with things that are knowable, with facts which, by patient observation and experiment, may be proved.

In proving the facts of science we must exercise patience, impartiality, and absolute honesty. We must observe accurately, distinguish between the important and the unimportant, between the real and the apparent, and learn to weigh evidence, and finally learn to suspend judgment where the evidence is not conclusive. It is sometimes said that science leaves no room for the imagination, and that science teaching destroys the imagination of children. This, it appears to me, is an unjust criticism; for, while science does try to have its knowledge well based upon facts, and has little patience with statements that cannot be proved by any who have the skill and will take the time, in its theories, its guesses at the cause of the phenomena observed, science has need of, and gives, exercise to the most highly developed imagination. In fact, much of the growth of science is due to the continual effort to learn whether the theories, the results of well-guided imagination, are actually in accordance with the facts.

Almost any of the natural sciences, properly taught, will give this kind of training. Indeed, all of the natural sciences are artificial subdivisions of one great whole. As our knowledge increases and the boundaries of the known are extended, one science will merge into another, and we shall see that there are no natural boundary lines between them; all boundary lines are artificial and of our own making. Such a merging of two sciences is now going on between physics and chemistry. Fifteen years ago the merest schoolboy could accurately point out the difference between physics and chemistry; now we find the one passing over into the other, and where we cross the line dividing them those who know the most about it are unable to tell.

As our knowledge of the biological sciences increases on the one hand, and of physics and chemistry on the other, we shall find them drawing together, and some time, in the still distant future, the scientist who tills the intermediate ground will find no real division between these sciences which, from our lack of knowledge concerning them, are now so wide apart.

The experimental sciences have certain advantages for educational purposes in the secondary schools. In these we can reproduce and control many of the forces of nature and govern the conditions under which they are to act. Physics and chemistry are perhaps the most developed of the experimental sciences.

They are studied almost wholly in the laboratory, where the student is able to produce a given set of conditions repeatedly and examine

the result of these conditions acting upon various things, and thus to discover laws and test them as often as he wishes. Few other sciences are so favored in this respect.

The geologist, for example, can reproduce in the laboratory but few of the world-building forces of nature which he wishes to study. So, too, the astronomer has little control over the phenomena which interest him, and in order to study them has to await their natural occurrence. Moreover, chemistry and physics are, in a sense, fundamental sciences; the other sciences being more or less highly specialized applications of these, and a certain knowledge of chemistry and physics being necessary to their proper understanding. It would seem, then, that chemistry and physics are the best adapted for educational purposes in the secondary schools; but with those who think otherwise I shall have no controversy. At least physics and chemistry are the sciences most usually taught in the secondary schools.

With the time at the disposal of the classes in the high school it is, of course, impossible to master any single science. The greatest evil of our present method of teaching science in the secondary schools is, it seems to me, a tendency to cover too much ground. This, of course, comes from the desire to gain as much information about the science as possible; but it makes more difficult the more important point — the gaining of scientific training. We can gain information all our lives; with many the high school offers the only opportunity to gain scientific training. This attempt to cover much ground necessitates dealing with more or less isolated facts, the connection between which may or may not be pointed out by the teacher or the text-book, but which is rarely appreciated by the pupil. The pupil is hurried from topic to topic, without taking time thoroly to understand the relationships of that which he has studied. In the laboratory especially is the evil effect of this hurry noticeable; the feeling of haste and pressure, consequent upon this desire to get on, is directly and fundamentally opposed to the conditions for successful laboratory work. It causes the pupil to slight the experiment in some essential detail, the "one step omitted which nature never pardons;" causes the experiments to be only partially successful.

The continued performance of experiments which are only partially successful is worse than no experiments at all; it causes the pupil to lose confidence in himself and in the science; it develops nothing of that feeling of strength and power which is the result of successful laboratory work.

This custom of covering a large amount of a science in an insufficient time accentuates what is almost a national characteristic — a feeling of haste, a lack of appreciation of the importance of small things, and a disinclination to stick to one thing until it is mastered. It does nothing toward developing what is called the scientific attitude of mind.

Instead of attempting to gain what is sometimes called a "broad view" of the science, it seems to me that it would be better to get a deep view; better to get the fundamental, basic facts of the subject thoroly in mind in such a way that the pupil is convinced of their truth by his own powers of observation and reason. Let the theories of the science follow the facts which they are to explain; let their relationship to the facts and to the science as a whole be carefully considered, always remembering that future discoveries must modify them, and perhaps render them entirely untenable. Encourage the pupil to form his own estimate of the value and probability of a theory, basing his estimate upon the evidence, upon its reasonableness, and upon its usefulness to the science.

Successful laboratory work requires patience, close attention to detail, and close powers of observation. To cultivate these the feeling of haste, their greatest foe, must be overcome. The pupil should feel, when he undertakes laboratory work, that he has all the time necessary to perform the experiments with the greatest possible care, in order to get the best possible results; to repeat the work, if necessary; to take every precaution that will add to the accuracy of the results. He must learn to be unwilling to leave an experiment until he thoroly understands it and its bearing upon the subject in hand.

The pupil cannot, of course, get *all* of his facts from his own laboratory experience. This is neither necessary nor desirable; he must, indeed, depend largely for his facts upon the experience of others. My point is that he should get a few facts, and get these few fully and thoroly, from his own work. This will give him the most desirable laboratory training; it will enable him to understand the methods of getting nature's facts; and it will give him, therefore, a keener appreciation of all the facts which he uses, tho they are not the result of his own experience.

In selecting the experiments to be performed by the pupil constant regard should be had to the pupil's laboratory experience and advancement, to his skill and ability to perform them successfully. Every experiment should either illustrate some important principle or some important property of the thing under consideration. It is usually not worth while to illustrate by experiment phenomena that are occurring about us all the time, and are already familiar to the pupil, or can be made familiar by simply calling his attention to them.

For example, it is scarcely worth while to perform experiments in the laboratory to distinguish between chemical and physical action, while we are continually surrounded by examples of each in nature, to which the pupil only needs to have his attention called in order to get as perfect an idea of physical action as he will by heating a platinum wire in a Bunsen flame, or as perfect an idea of chemical action as he will by heating a test-tube containing sugar. For the purpose of the kind of training which laboratory work so well gives, experiments should be selected which

require some skill and thought to work out, and, wherever possible, they should be quantitative.

I do not sympathize with the tendency to make the laboratory experiments for pupils as simple as possible, and to take the fact that an experiment can be performed with ordinary kitchen utensils as ample reason for introducing it into our school courses. I do not like an experiment which requires an affirmative answer to the frequent question: "Is that all there is to it?" Such experiments are in large part responsible for the prevalence of that unwholesome dread of experiments which require some time and skill for their performance, which is so prevalent among the students entering our colleges. Experiments which require little thought are very apt to receive it.

As a whole, I believe physics has certain advantages over chemistry for high-school work, because it deals with phenomena that are more apparent to the senses, and with phenomena which permit of a readier quantitative study; but chemistry also has certain advantages peculiar to itself. Since, however, chemistry and physics are no longer independent sciences, I believe the ideal course of experimental science for secondary schools will be one which makes no effort to keep them differentiated, but, rather, which unites in one course as much of both as is needed to gain a thoro understanding of the phenomena studied. I feel very sure that a two-years' science course in the high school, based upon such lines, would give most satisfactory results.

Finally, in all science work, but especially in the laboratory, very much depends upon the teacher. School authorities do not, as a rule, sufficiently appreciate the demand made upon the time and energy of their teachers by laboratory work.

The instruction in the laboratory being largely personal, a teacher cannot successfully handle here such large classes as in the recitation room. In the laboratory the pupil must be constantly watched, and not allowed to acquire slovenly habits of work; laboratory notes must be looked over, and errors of observation and conclusion pointed out and corrected; teachers must use every opportunity to converse with the pupil about his laboratory work, to draw him out, and to direct his attention to certain points by questions; for thus an experiment which may be of almost no value to the student unaided may sometimes be rendered a mine of information. All of these duties make large demands upon the time and working power of the teacher.

The importance of a good teacher outweighs all other considerations. President Eliot has said: "Two kinds of men make good teachers — young men and men who never grow old."

Good science teachers have three indispensable qualifications — they must know their subject, they must love their subject, and they must have an enthusiasm for work.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 13, 1899

Owing to the unavoidable absence of two speakers on the program, the two sessions arranged for were merged into one. In the absence of the regular chairman, E. E. Barthell, Nashville, Tenn., was elected temporary chairman.

Eric Edward Rosling, Esq., Tacoma, Wash., read the first paper, entitled "Employment and Dismissal of Teachers." He was followed in a discussion of his paper by Samuel F. Smith, San Diego, Cal., and E. Morris Cox, Santa Rosa, Cal., and a number of the members of the Teachers' Federation of Chicago.

William George Bruce, Milwaukee, Wis., then read a paper entitled, "Quo Vadis, School Board?"

This was followed by a paper read by Dr. Ella J. Fifield, Tacoma, Wash., entitled "The School Board and the Press."

The nominating committee, which had been appointed at the beginning of the meeting, then reported the following-named officers for the ensuing year:

For *President*—Hon. E. E. Barthell, Nashville, Tenn.
For *First Vice-President*—Thomas M. Gafney, Syracuse, N. Y.
For *Second Vice-President*—William F. Bradt, Ishpeming, Mich.
For *Secretary*—William George Bruce, Milwaukee, Wis.
For *Executive Committee*—Charles Cassat Davis, Los Angeles, Cal., *Chairman*.
Lyman Evans, Esq., Riverside, Cal.
William S. Mack, Aurora, Ill.
R. L. Yeager, Kansas City, Mo.
E. B. Kruttschnitt, New Orleans, La.

Upon motion, the report was adopted and the officers declared elected.
Adjournment followed.

WM. GEO. BRUCE,
Secretary.

PAPERS AND DISCUSSIONS

EMPLOYMENT AND DISMISSAL OF TEACHERS

BY ERIC EDWARD ROSLING, ESQ., PRESIDENT OF BOARD OF EDUCATION, TACOMA, WASH.

"Good Lord! How many good and clear wits of children be now-a-days perished by ignorant schoolmasters," wrote Sir Thomas Elyot in 1531. Centuries have come and gone since then—centuries whose educational reformers, like Comenius, Milton, Locke, Rousseau, Pestalozzi, Froebel, and Spencer, have accomplished wonders for the schoolboy;

yet even now we can occasionally hear this sentiment echoed, at least faintly, from both rural and urban districts, because there are still a few school boards which are either ignorant or regardless of their trust, or have a crude conception of it.

In our city lives a man who has for several years vainly placed himself "in the hands of his friends" as a candidate for school-board honors. In urging his claims for my support in our last contest, he laid emphasis upon his four or five years' experience as a teacher in an eastern state. Surprised at learning of this qualification, I pressed the subject further, and was gravely informed that the school board under which he served followed the very excellent and economical plan of annually offering the position to the lowest bidder, and with pardonable pride he added that he received the appointment every year for several years.

Scarcely less questionable, or more conducive to the promotion of the welfare of the schools, is the similar economic plan adopted by some boards, in both city and country, of fixing the salaries of their teachers at the lowest schedule upon which any teacher, almost regardless of qualifications, can possibly be obtained, and then justifying their course by demonstrating that their teachers rarely leave them for other schools. They do not seem to realize that the teachers for whom their schedule was an attraction would hardly be the ones for whom other and wiser boards would be seeking; and that "the very foundation of the whole commonwealth is the proper bringing up of the young" is believed as firmly today as when Cicero proclaimed it centuries ago. And as the other mighty factors in the make-up of the education of our youth, namely, home, society, and church, cannot be universally and infallibly relied upon to do their whole part, the people believe in education thru the medium of the public school. Allow our school system to degenerate thru the introduction and retention of incompetent teachers, and we allow the foundations of our governmental structure to be seriously undermined, and at the door of the department of school administration may largely and justly be laid the blame.

Am I putting that too strongly? I believe not. Chosen by the people, who thus delegate largely parental responsibility, and created and clothed with extraordinary powers and authority by the state, our boards of education, as we are called in the state of Washington, are made the legal guardians of our schools, the business managers of the system, and held strictly accountable to the general public and the state for the manner and method of our administration.

Ventilation, heating, lighting, recreation, and seating, each present problems for our solution that are both perplexing and difficult; but overshadowing all these, in its importance and far-reaching influence upon the welfare of children, community, state, and nation, is the subject of this afternoon's paper, the "Employment and Dismissal of Teachers."

Few of us realize our great need of divine guidance and wisdom in this important branch of our work, or the care and deliberation requisite in the execution of this part of our trust. We hold the balance of power and can make for weal or for woe.

Permit me, therefore, to suggest that the personnel of our board is properly our first consideration, for water will not rise higher than its source, and a board itself deficient in manhood, character, and moral worth can hardly be relied upon to make these qualifications the first test of fitness, as they should be, in the selection of teachers. The board should be, and can be made, nonpartisan. School politics, or the application of politicians' methods to school affairs, should never be tolerated for a moment, or teachers' positions will rapidly become considered as spoils; the introduction of a spoil system into our schools would prove disastrous. Schools should be kept out of politics and politics out of the schools. But, you ask, can this be done? Let me tell you how. A board that is truly alive to its trust and responsibility will see to it that only the right kind of men and women are elected to its membership. In due season, before the annual election, quietly have a meeting of such members of your board as you know have a true conception of what is due from members of a school board; then carefully canvass the names of your best and most representative fellow-citizens, and select a ticket which your board will support, taking care that every name upon it represents a man or woman who (1) has a good Christian character and the confidence of your community; (2) is not a politician nor a political aspirant; (3) is a man of good judgment and common-sense; (4) has no grievance to satisfy or ax to grind, no enemy to punish or friend to reward; (5) whose ambition will be to improve the schools; and, lastly, see that your ticket has on it names representing each of the leading political parties, taking care that the election of your ticket will not give any of said political parties an unfair majority in the board as a whole. You then have a ticket that will bear close scrutiny, and will receive the united support of your teaching corps and its friends, and of the patrons of the schools, and thus insure success at the polls. This can be done, and, if done, the best result in the selection of teachers is possible.

Before the election of teachers naturally must come their selection, and right here we are to put the test as to our own fitness for our office. The patrons of our schools may employ whom they will for their doctors and lawyers, but as to the choice of a teacher, to whom is intrusted that most important duty of the development of the minds and bodies of their children, they have nothing to say. With this tremendous responsibility shifted onto our shoulders, do we not, indeed, have need of exceeding care and wise deliberation? The teacher is to open the eyes of the child to a world of wonders, his mind to realms of knowledge; and from him the child should learn to love truth, purity, refinement, and all that makes

up a perfect character; and to scorn meanness, idleness, and all that debases. The teacher's personal influence is greater than that of our text-books, libraries, or laboratories, for the teacher *is* the school; therefore, how great the necessity of careful selection! We may be proud, and with reason, of our buildings and grounds, but every school board should have reason to point with greater pride at a corps of teachers who are not only teaching history, physics, English, etc., but by word and example awakening their pupils to the highest and noblest purposes and deeds. Yes, without discounting the necessity for culture and attainments in the least, I would still make true manhood and womanhood my first test of fitness in the applicant.

The superintendent is, and should be, the official and expert adviser of the board; yet, to avoid all appearance of evil, as well as to insure the best results, the rules should require him, after careful and personal investigation of the qualifications of all applicants, to select at least three of the very best, everything considered, for each vacancy to be filled. His list of recommendations should then be referred to a committee on teachers and salaries, who should be selected because of their marked fitness for this particular work. If not practicable for the entire board to do so, the entire membership of this committee at least should not only carefully examine the testimonials accompanying the applications, but should meet each applicant personally and, if possible, inspect her work. To this end the superintendent should assign each of the recommended applicants to sufficient substitute work to enable her to fairly demonstrate her qualifications to the teachers' committee, or to the paid supervisors of our larger cities. The committee is then in a position to distinguish the nagging, scolding "school-marm" from the one whose love for childhood keeps her kind and patient thru mischief and dullness; to compare their discipline, methods, etc., and make a wise report. The election of relatives of the board or committee should be avoided, if possible; the politics of the applicant should never be known or considered; one applicant should never be preferred over another by reason of her influential friends, or other similar pressure, or because of her poverty or need; for our schools are not asylums, and we must remember that "the welfare of the child shall be the highest law."

The election should be for one year and to the end of the current school year, rather than for an indefinite term, conditioned even on good behavior and successful work.

Doubtless this latter proposition will provoke much adverse criticism, but it is submitted only after mature deliberation, and is based upon experience in our own city. The objection may be raised that the teacher is thus kept on the anxious seat, preventing her from really producing the best results of which she is capable. To a very small extent this may be true, but, on the other hand, the annual election is a constant incentive

to the best possible efforts, and will prevent careless, indifferent work, as long as the board is alive to its duties and does not allow the annual election to degenerate into a mere formality. The condition of good behavior and satisfactory work in a life term is, except in extreme cases, usually of little practical value. Experience teaches us that it requires a flagrant case to interfere with any life term, largely because there is no periodical investigation, upon the issues of which is based the continuity of the term. See, for example, the recent exposure of the shortcomings of that New York surrogate to whom a long-suffering public submitted for years, until Governor Roosevelt personally took the matter in hand and in his characteristic manner compelled a surrender of the office. If the merits or demerits of this surrogate could have been passed upon by the people at the polls annually or biennially, you may be sure he would have proven a better judge.

If "when once in, always in" becomes recognized by the teachers of your corps as the policy of the board, whether based upon a formal annual election or a life term, the board has permitted a mighty blow to be struck at the welfare of both school and community, and is guilty of criminal negligence that should not go unpunished. The annual election affords the needed opportunity to drop the unsatisfactory teacher without the unnecessary publicity of a discharge. The simple omission of a name in the list of re-elected teachers will rarely be discovered. And further to relieve the unsuccessful teacher from embarrassment, both financial and social, I believe that, while all renewals of contracts should take effect from the opening of the fall semester, yet the annual election should be held immediately preceding the beginning of the annual summer vacation, so that abundant opportunity may be given the rejected teacher to make other plans for the future, and at the same time relieve all the other teachers from any anxiety and insure to them the full enjoyment of the vacation season.

But whether you employ your teachers annually or not, let the teacher who is doing good, faithful work feel, not only that she has your approval and appreciation, but that she can count upon your support just as long as her exemplary work continues. Such teachers, with each succeeding year's added experience, become more and more invaluable, and should be retained at any reasonable cost.

There are many little details and items that might properly be considered in connection with this subject, but which are largely subject to the conditions of each school district. In this brief paper I have not dared to venture into so exhaustive a field, but have contented myself with the statement of a few general principles, the observance of which I modestly believe would prove of practical value to us all.

Just a word further on the subject of dismissals and I am done. Except in cases justifying summary action, such as immoral conduct, I

believe each teacher is entitled to fair warning before dismissal for incompetency; the notice should be coupled with friendly criticism and advice from the proper source, acquainting her with her deficiencies; and both supervisors and principal should give her unusual attention and assistance, not only for the sake of the scholars, but for her own sake. Such a course has been the making of some of our best teachers, who would otherwise have retired from the profession discouraged. A change of grade or environment may bring about a happy result.

If it is self-evident that she can never become a successful teacher, have her told so kindly, and, above all, do not soothe her disappointment by arming her with credentials and recommendations in subtle form, calculated to deceive wherever presented. Do not pass such a teacher along to inflict her incompetency upon others; nor keep her yourself because of her influential friends; but remain true to your trust, and remember that the welfare of the child is your highest trust.

DISCUSSION

Sam Ferry Smith, member of board of education, San Diego, Cal. — The object and purpose of the public-school system is to educate the child; to bring into play and activity, and to direct into the proper mental, moral, and physical channels, the dormant, growing, and developing powers. The child comes to the school "a bundle of inherited tendencies," good, bad, and indifferent. To furnish an environment that will stimulate and bring out intellectually and ethically all that is good and noble, and to repress all that is bad and vicious, is its mission. The chief factor is the teacher. You may have fine buildings, elaborate text-books, and expensive laboratories, and yet without a good teacher fail to educate, while with a good teacher all else may be deficient, or even totally wanting, and yet marvelous results be obtained. The teacher, then, is the principal factor in a successful school.

How should this teacher be selected? What qualifications should she have? And by whom should the selection be made?

Let us first consider the qualifications. She must, of course, have a teacher's certificate; be of good moral character, neat and tidy in appearance; have sufficient physical strength to maintain discipline; have complete control over herself, particularly her temper; above all must possess that subtle but indescribable power of imparting knowledge to others, of instilling by moral influence the highest ethics, inspiring the pupil by example rather than by precept to develop the best and noblest that is in him; the power of enforcing obedience by strength of will rather than by force of muscle; and last, but not least, must have a love of children and a strong sympathy with their weaknesses and frailties. A rare combination, truly; yet not one of these qualities can be omitted if the best results are to be obtained.

As to the manner of selection: There are three methods now in vogue; all others are modifications or combinations of two or more of these three. They are, first, selection by a board of education at large; second, selection by a committee of the board appointed for that purpose; and, third, selection by the superintendent of schools.

Much can be said in favor of each system; each has its advantages and disadvantages, and should be considered in all its various phases and modifications; but time does not permit; therefore I shall devote the time allotted to me to the presentation of what, to my mind, is the best system, viz., the selection by the superintendent of schools—a system which, I believe, has the most advantages and is subject to the least criticism. When this system is suggested, the question is at once asked: Why centralize this power? Why should a board of education abdicate this prerogative to one man, and that man an employé? I answer: Because the average member of a board of education has neither the time, opportunity, nor capacity to make the observations and investigations necessary to perform that important duty in a proper manner. To determine whether or not a teacher possesses the required qualifications it is necessary that frequent visits be made to the schoolroom, so that her influence and methods may be observed; to ascertain whether or not she has that requisite peculiar personality; to note her moral and intellectual influence over her pupils; to compare her work with the work of other teachers of the same grade; to examine the written work of her scholars to see whether or not the results are up to the standard. This must of necessity consume a great deal of time, and must be done by personal observation, contact, and examination. An attendance at class-day exercises or other public functions is not sufficient, nor does a five- or ten-minute visit to the school once or twice a year suffice. Credentials, no matter how high-sounding or from what institution issued, will not determine it. Recommendations, no matter from what source, are not conclusive. The teacher may be a graduate of the highest institution of learning, may be entitled to write enough letters after her name to make an alphabet, and yet, as an imparter and inspirer of moral, intellectual, and ethical qualities in a child, be a dismal failure; while one with no certificate higher than that of a grammar school or high school, or in fact no certificate at all other than that giving her the right to teach, may meet with marked success and be a truly ideal teacher. Teachers are, to a large extent, born and not made; and while training and education are necessary and beneficial, yet they are not all; and those qualifications which make the best teacher depend more upon the character and personality of the individual than upon the training and education that she may have had. Hence the proper selection cannot be made upon credentials or recommendations, but must be made after a full and fair trial amid the conditions and surroundings in which the teacher is expected to work, and after a careful observation by the person who is supposed to make the selection. All applicants should, therefore, serve from three to twelve months on probation before receiving permanent employment. It follows of necessity that the person who makes the selection must be one who has the time, opportunity, and ability to perform that duty. Except in rare cases, members of the board of education, coming as they do from the busy walks of life, cannot spare sufficient time from their business duties, and have not had the technical training in methods of teaching which would qualify them to pass upon the qualifications of a teacher. Hence I feel and believe that the proper place to lodge this power is in one who, by reason of his position, training, and opportunities, is best qualified to make the selection. Let the board of education select a superintendent who is truly devoted to the cause of education, whose whole ambition and purpose is to carry out in its fullest scope the true mission of the schools; then place in his hands the power of selecting his corps of teachers, and hold him in strict accountability. When this is done personal "pulls," political preferences, influential relatives, and many other things that now in many cities make the educational department a dumping-ground for relatives and impecunious friends, will become extinct; incompetency will be weeded out, and the moral and educational standard of the school department will be elevated to the highest pinnacle, and become what it is destined to be — the best, noblest, and greatest institution under the American flag.

This high standard, once attained, should be maintained. Whenever a teacher from

any cause fails to keep up to the standard, she should at once be dropped and another teacher put in her place. And it should be the rule that, so long as the teacher maintains that high standard which should be required of her to gain appointment in the department, just so long should she be secure of her position, and no longer; and hence, having no tenure in office but that of satisfactory service, the teacher will be ever alive to the necessity of having her work up to the highest standard.

QUO VADIS, SCHOOL BOARD?

BY WILLIAM GEORGE BRUCE, EDITOR "AMERICAN SCHOOL BOARD JOURNAL," MILWAUKEE, WIS.

The general progress which has manifested itself in all lines of human activity has touched the management of our educational affairs with equal force. While it may be said that all advancement must have its impetus in knowledge, and knowledge its source in education, we differentiate here education in the abstract from a system or machinery for its application or distribution. This system has kept fully abreast with the educational progress of the day, and the machinery which was once crude and clumsy has grown into an intricate piece of mechanism. The principles which serve as its motive power have always been the same.

The school board of the present day is, however, a different affair from the school board of even a quarter of a century ago. The simple course of study, the limited list of books, and the meager school supplies left little for the old-time school board to look after. The amplification of studies, the increased size and number of school buildings, together with the requirements of a modern schoolhouse, make greater demands upon a school board.

These demands are met by men who are equal to the task. The rough and unlettered citizens who served upon the old school board have gradually been displaced by the business and professional men in every community. The farmer as well as the mechanic who may hold a membership in a school board is fully equipped to meet the obligation of a new condition. For all that has been accomplished we should feel truly grateful. The thousands who have served on boards of education have contributed their share toward the great progress made. Without them little could have been accomplished.

The establishment of our public-school system brought into life the first school board. The latter was necessary for the life of the former.

The very nature of our form of government called for a system of school government which brought the schools as near the people as possible. The foundation of the republic rested then, as it does now, upon the public-school system. It involved, not merely the education of the

people, but an inculcation of the spirit of democracy. This spirit found its profoundest expression in its school system, and was typified in the real conservator of the schools, the school board, a body created of the people for the government of the school system by the people and for the people. The very fact that the people had the management under their own control served as an impetus toward enlightenment and freedom. A centralized or paternal form of school management would have been fatal to the cause. A radical change would have come over the spirit of our institutions. Plutocracy rather than democracy would have been the result. But the school board proved to be the real hand that rocked the cradle of democracy. It watched unceasingly the interests of the public-school system which has proven itself the bulwark of a republic. So much for the introduction, at least, of my discussion.

I have thus far merely aimed to lend the subject a background which shall show the spirit which its founders breathed into our school system, the fundamental principles which have so successfully governed them.

I mean now to contrast some of the modern tendencies in school government with the well-established doctrines which have stood the test of time so well — tendencies which not only weaken and divert, but antagonize its very existence. That these tendencies should creep into the management of our educational affairs, that centralization and paternalism should even find recognition at the hands of progressive members of boards of education, may be difficult to understand.

In this age of feverish haste it may not be surprising that we should move, temporarily at least, in wrong directions, that we leap into new departures before we have foreseen their ultimate effect. But the paternalist, the autocrat, is abroad in school affairs as well as elsewhere. He seeks centralization of power, of monopoly in the management of our educational affairs, with the same avidity with which he combines commercial interests. A one-man power is his ultimate aim.

One form of this modern tendency finds expression in the disposition of educators to question the right of school boards to have any jurisdiction over the education of the child. Superintendent Jones, of Cleveland, recently voiced the sentiment of educators when he challenged the right of anyone, not a specially trained teacher of the highest attainments, to plan or criticise a course for our public schools. Not even the school board is to have a voice in the matter.

The answer to this proposition is well put by Mr. Backus, a member of the Cleveland school board. He said :

> I take issue with the superintendent; I believe that the men and women in active business and professional life, the people who come into daily contact with the different phases of our business and social and political existence, are specially fitted to judge and determine what should be taught in our schools, to meet the modern requirements of citizenship. This most certainly was the thought of the legislature of the state when it

enacted the law directing the members of the board of education — who are the direct representatives of the people — to determine by the majority vote of all members elected the studies to be pursued, and what text-books shall be used in the schools under their control. It is within the province of the superintendent to determine how a subject is to be taught, but it should, and must, remain the duty of the school board to say what shall be taught.

Another proposition that reveals a modern tendency emanates from Superintendent Andrews, of Chicago, who arrogates to himself the sole right to select and appoint teachers. Here, too, school boards are to have no voice in the matter. Let me give you the answer to this form of centralized power in the language of Mrs. Wiles, who spoke before the National Convention of School Boards in 1897. She said:

> If boards cannot judge of the qualifications of teachers, how are they to judge whether the superintendent appoints, promotes, and dismisses on merit alone, and whether he is himself a capable and inspiring leader of teachers? If boards know nothing of text-books and courses of study, how are they to judge whether the superintendent chooses wisely? The fact is, the board (or at least some members) must know something of all these things, or fail in its duty. Otherwise it is at the mercy of a superintendent who may work simply to please parents and teachers, and, succeeding in that, may draw his salary year after year, and the schools grow poorer and poorer, with no one to say "nay."

If a school board is incapable of ratifying the appointment of a third-grade teacher, how, in the name of common-sense, can it ever be intrusted with the appointment of a superintendent?

It is by no means argued that the superintendent is not to have a voice in all matters touching upon the professional side of school work, or even the greater power in this direction, as I shall demonstrate.

The progress in school government includes, no doubt, a clearer understanding between the board and its superintendent, a more definite division of duties and responsibilities, as well as a more clearly defined relationship.

The causes which bring into life these small reform school boards may in every instance be traced to the misdeeds of a larger predecessor. The good public and the press, at the sound of an internal school-board rupture, determine that the size, rather than the mode and manner of a board's operation, is at the bottom of its weaknesses. The capacity of the individual members and the representative character of the organization become less of a factor in a reform movement than the numerical proportion. A smaller body is legislated into life, the representative feature is overlooked, and an aristocratic school board is intrusted with the care of the schools. The elimination of the representative feature is presumably made up in the character of the newly appointed.

Men who stand highest in commercial and professional circles ought to make the best material for a school board. The proposition naturally appeals to one's reason, but the selection of any one distinctive class

offers some serious objection. True, a school board should be made up of men who have a good standing in the community, but also of men who possess in a high degree that interest which will prompt them to give their best service. A great lawyer or a wealthy banker may be a failure as a school-board member. A lack of time and inclination to the work may unfit him. The indolent or indifferent man is certainly undesirable, but equally so is the man who is too busy — the man who cannot or will not give the requisite time. In fact, men of this class have oftentimes undervalued the dignity, the importance, or the duties of their position. They had to be urged in the first place to accept, and felt somewhat above the place while serving. While you may hold this to be the exception, I have found it, in the larger cities at least, to be more than a mere exception.

Furthermore, these men do not, as a rule, give the requisite time to do justice to their position. It is oftentimes said that it takes a busy man to find time for school-board duties. I grant this. But many of our professional and business-men who accept school-board honors do not — because they are too busy — give the time and attention necessary. They are unable, altho in attendance at regular board meetings, to give that thought, that deep interest, which makes a draft upon time by attending committee meetings, and which is so essential to the successful administration of school affairs. This sort of school member necessarily becomes an exclusive personage. The great pressure upon his time, the multiplicity of affairs with which he deals and in which school-board matters, from his standpoint, are classed as insignificant trifles, render him at once an autocrat as far as his relations with the school system and the public are concerned.

I have in mind here a city school board made up of the cream of commercial and professional men. Its leading members cannot be seen upon school matters except at committee meetings. A visit to the office of the president in a high office building will find you confronted with a polite clerk who will deliver your card to the great man who is hid in the inner recesses of his private sanctum. You wait at the outer portals of this temple until the clerk returns to tell you that school matters cannot be discussed by his chief. The very nature of your business will exclude you from the great man's presence.

Here I hold that the man who holds membership in a school board owes a certain amount of time to those who have legitimate business with the school system. A parent, a pupil, a teacher, even a stranger, may have a claim with the school-board member which he is in duty bound to respect.

He is the mediary between the school system and the public, and should be the friend of the pupil and the teacher. Holding, as he does, confidential relations to the school system, he must be willing to give a

hearing to his constituency, in order to determine whether their case should be brought before a committee. An experienced member knows that many of the ordinary affairs must be adjusted without being brought before a committee, and, again, that the average teacher, pupil, or citizen may be extremely embarrassed at being obliged to go before a committee meeting. In this connection let me say that even the bookman, or supply agent, is entitled to a hearing if the board is in the market for his goods. A personal interview will sometimes bring out information regarding the goods in question which cannot be elicited in the five- and ten-minute speeches before committees. An agent will always discourse freely the shortcomings of his competitor's wares — shortcomings which could not be brought to light so readily in any other way. A great deal of information on a given subject can be obtained from these salesmen — who give it gratis.

The president of the school board should be at the helm. His duties and responsibilities are greater than those of the ordinary member. His guardianship over the school system not only implies wise leadership in school-board transactions; it makes him the counselor and the friend of the parent, teacher, and pupil. To him must be confided the many things which, if given publicity, would cause a calamity. He must relieve the strain and friction which are so common in school management, but which only a wise and considerate man of affairs can adjust. We have seen excellent school systems where the school board was made up of earnest men of good character, but with no claims to distinction or exceptional local prominence, while we know of school systems which are below the usual standard, whose school board consists of the highly stationed element.

Thus some of the leading cities in the United States are afflicted with aristocratic school boards. Usually the largest cities have intensified the aristocratic feature most. New York city a year ago prided itself on its reform school board, which was only about one-half the size of the former organization. Small boards and high-class men was the cry. Today the most thoughtful people in New York city pronounce their reform school board a failure.

In a recent interview Mayor Van Wyck made this statement:

> I am going to advertise for first-class men who can and will give all their time as commissioners of education. The great trouble at the present time is that the school commissioners cannot give enough time to their duties, and the result is they know little or nothing about the detailed work of their important department.

A similar wail comes from other cities. What is the next logical step in cities where the idea of concentrated power has gained ground? The appointment of a salaried commission of three men who shall govern the school system. This suggestion has already been made, and if the paternalists are true to their creed, such a commission will be the ultimate

outcome in the larger cities. The school system will then be placed on a level with the police, fire, sewerage, and sundry other departments of a city government.

In line with this tendency is the new fad which likens a school system to a factory plant. Like the factory superintendent, the school superintendent is to employ all hands, fix all salaries, and boss the job from beginning to end. The school board is to become a sort of board of directors which is simply to pore over the annual reports and compute the educational dividends which may be squeezed out without smashing the educational factory plant. To this plan I simply reply that no school-board member can read the result of a school system from a superintendent's report.

To use the language of a prominent school-board member :

> The success of the private corporation can be measured accurately and beyond doubt in dollars and cents, while the success of a school superintendent is in developing all the inherent power of a child, and in forming his mental and moral character. There is no measure of such success or failure, no hard or fast test; the board of education cannot sit back in office chairs and read this from scholarship averages, examination marks, and numbers of promotion.

In order that a board of education may reach the largest measure of usefulness and fulfill in the highest degree the sacred duty devolved upon it, the original ideas which brought it into life must prevail. It has stood the test of time, and while the changes which arise with new conditions affect only the means to an end, the principle of democracy must prevail now as it did then, not only in the schoolroom — where one child is the equal of another — but in the school board which gives life and sustenance to the school. In order that this principle may be exerted to its highest degree of blessing, the school board must be truly representative of this community. The poor but intelligent mechanic should be given a place beside the rich banker ; the small tradesman should be entitled to the same recognition that is accorded the prominent professional man. The board should represent the various social strata as well as political shades of a community. Its members should be in direct touch with the masses, whose throbbings of life they feel, with whom they sympathize, and whose needs they realize. A proper division of duty and authority in the school board which is numerically as well as intellectually strong enough will never make concentrated power needful or attractive.

> The possession of unlimited power in any direction, the ability to control absolutely the pecuniary condition of a large number of people [says Mrs. Taylor, of the Cleveland board], involved a responsibility from which any man might well shrink. Yet, observation and experience teach us that the exercise of such power has a tendency to render almost any man despotic in disposition, selfish and grasping in practice. It has been said that a wise despotism is the best government in actual practice, and Americans are oath to subscribe to the statement.

"Concentration of authority in the past has always resulted in the

building up of some at the expense of the many," says President Will of the Kansas State Agricultural College, "and the ultimate overthrow of liberty." Imperialism should be as foreign to the American public-school system as it is to the genius of our form of government. Hence an imperialistic form of school government should not and cannot be tolerated. The present tendency toward concentration can end in nothing less than an educational trust — the concentration of the one-man power.

Let us adhere to the old-time idea of the genius of republicanism, which gives the schools to the people who must maintain them; to the idea that a school system does not exist for self-aggrandizement of ambitious citizens; that schoolhouses are not built for architectural ornaments; that the school board is not the stepping-stone to high political honors; but that schoolhouses, -books, and -teachers, and, last but not least, school boards, all exist for one definite purpose — the educational welfare of the child.

THE SCHOOL BOARD AND THE PUBLIC PRESS

BY ELLA J. FIFIELD, M.D., MEMBER OF BOARD OF EDUCATION, TACOMA, WASH.

Two powerful factors in directing the educational affairs and the public policy of the nation are the public schools, as represented by school boards, and the public press. These cannot be considered as two opposing factors, but as great powers working along different lines in the education of the people. The school board represents the people in the care and conduct of the public schools. Its power for good or ill is incalculable. It controls to a great extent the mental, moral, and physical interests of children at a period of life when they are not only being educated, in the common acceptation of the term, but also during the time when the plastic mind is being molded and the elements of character are being developed. It depends on the wise or unwise action of school boards whether the hands that fashion the eager, active, childish mind shall be skillful, strong, clean, and capable, or weak, inefficient, and careless.

The school board must accept the responsibility of providing training that will not merely give the boy and girl intellectual development, but that will surely result in forming the character of the future citizen. The work of the school board of today is not so manifest in the present as it will be in a few years hence. What we as school boards are now sowing thru the teachers we employ, and the standards we set up, will be seen most clearly in the harvest of by and by. Still, there is a present influence

exerted by our schools, both by the lessons and ideas carried into the homes by the children, and by the presence in the community of a body of cultured, upright men and women, such as most teachers are, that gives direction and impulse to the affairs of that community. The individual is the unit of the state and nation, and it is by the influences exerted on individuals that that great, invisible, indefinable, but all-powerful something which we call public opinion is formed. The public schools certainly have a large share in this formation, but another great factor previously mentioned is the mighty influence of the public press.

The schools reach the sixteen million children of the land and thru them touch the homes with their influence, but the newspaper goes directly into the heart of the family, and carries its messages of good or ill into the hands of our seventy-five million people. So universal has its circulation become that scarcely a house is without its one to half a dozen papers. Even in remote country places, hamlet or farmhouse, this messenger from the outside world finds its way and exerts its silent power on every reader.

It may be the children of a larger growth are as unconscious of the influence exerted on their actions and opinions by their text-book, the newspaper, as the little ones of their growth of character in the school-room; but the power is there; and the character, opinions, and expressions of the newspaper to a great extent mold the sentiment and dictate the policy of the nation.

This power is recognized in every activity of life. A great political party which looks forward to achieving success in its issues early lays its lines to capture the newspapers and secure their support.

If an individual wishes to promote any enterprise in a community, he is careful not to antagonize the newspapers, but seeks rather their indorsement. He knows his success depends largely on the estimate they place upon him and the light in which they place him before the public.

With these two great forces permeating the affairs of the nation thru child and man, it would seem that the best interests of all could be conserved by a harmonious combination of the two; or, if not an actual combination, then a friendly touch and spirit of co-operation between them. While the press is really a private enterprise conducted for profit to its owners, it is also in a sense a public institution, dependent on the public for its existence. It is used to promote enterprises of both a public and a private nature, and why should it not be especially enlisted in that most vital of all interests, the public school? Usually, I think, the press is awake to the affairs of the schools, and is ready to help foster its interests, but it may be mistaken in the line of the policy it pursues to gain the desired ends. One great trouble with newspapers sometimes is that they know so much that isn't true that they may be very misleading in the direction they give to public sentiment. No doubt part of the difficulty arises from a desire for information which they are unable to get

correctly; and as they must give their readers news of some kind, they evidently manufacture it for the occasion. Perhaps this might be avoided if the reporter were taken more into the confidence of the board and furnished facts to replace his fancies. The school board and the people should be in closer touch, and this may be to a great extent accomplished thru the newspaper. The public has a right to know what is being done by its elected officers, and can only obtain its knowledge thru the medium of newspapers. Representatives of the press ought to receive a welcome at the regular meetings of the board, and be given an opportunity to correctly learn the actions taken. This would undoubtedly often prevent being *mis*reported. There may be occasions when it would not be the part of wisdom to have all the proceedings of the board made public. In cases of discipline, or in discussion of qualifications of teachers, publicity might work injustice or even harm, but these executive sessions should be the exception and not the rule.

The wisdom of controversy with the press thru its columns is very questionable. It is hard for a school board, working conscientiously and faithfully for the best interests of the schools, working at a personal sacrifice of time and strength, and with no hope of reward, to be misrepresented, to have its actions ascribed to selfishness and favoritism, or be accused of extravagant misuse of the people's money, and to have other unjust and either thoughtless or malicious charges against its integrity sent broadcast in the community thru the columns of the local press. There is an almost irresistible desire to retaliate by a letter of denial and explanation, refuting all such accusations, which the paper would no doubt publish. In doing so, however, it is well to remember that the newspaper, like a woman, will always have the last word, and may dissect you and your explanation with a pen wielded with experience and pointed with sarcasm.

It is difficult to say *why* newspapers are thus ready to attack the actions and impugn the motives of such bodies as school boards, unless, from their editorial and reportorial knowledge of the seamy side of life, they learn to be suspicious and lose faith in everyone. It is possible, also, that the low standard of service set by the generality of public servants may lead many papers to estimate the character and work of school boards on the same plane.

I do not wish to intimate that school boards are faultless, nor are their actions always above criticism. But I do maintain that as a rule they are chosen from the honorable and respected class of citizens, and are usually desirous of conducting the affairs of the office fairly and honestly. This is especially true of localities where school affairs are kept separate from politics. Possibly the criticism of the press serves one good purpose — that of stimulating school boards to their best efforts, and acting as a check upon carelessness or faithlessness.

If newspapers were as ready to give praise when due, and recognize thru their columns the earnest endeavors and faithful performance of the difficult duties devolving upon school boards, as they are to volunteer unkind criticism, the interests of the schools would be better served, and boards would have less difficulty in securing the co-operation of the public in building up and increasing the efficiency of the schools.

It is to be hoped that a frank discussion of the situation may lead to a better understanding between the powers that be, and result in a closer co-partnership for the advancement of the public-school interests.

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 13, 1899

The department was called to order at 3 P. M. in the council chamber by President L. D. Harvey, Madison, Wis.

In the absence of the secretary, Miss Avery, of New York, Miss Elizabeth Skinner, Denver, Colo., was appointed acting secretary.

The president introduced Mr. Alfred Bayliss, Springfield, Ill., who read a paper on the subject, "The Function of School Superintendents in Procuring Libraries for, and Their Proper Use in, the Public Schools." Discussion was opened by S. P. McCrea, of Arizona, followed by President L. D. Harvey.

The president spoke on the report of the Committee on the Relation of Public Libraries to Public Schools, and suggested means for the distribution of the report.

Mrs. Grenfell, superintendent of public instruction of Colorado, recommended the reading of it by superintendents and principals, as it seemed impossible to put it into the hands of all teachers.

Comments and suggestions were made by Miss Dunn, Los Angeles, Cal.; Miss Casson, Mrs. Wadleigh, Mr. Kimball, Mr. Young, and Mrs. Eames.

Announcements by the president.

Meeting adjourned to meet Friday at 3 P. M.

SECOND SESSION.—FRIDAY, JULY 14

The second session was called to order in the council chamber at 3 P. M., President Harvey in the chair. Resolutions were presented by J. H. Van Sickle, Denver, Colo., on making the report of the Library Committee effective, as follows:

WHEREAS, The widespread interest among library managers and educational leaders in the extension of library work, thru the intelligent co-operation of the teachers in the public schools, renders the report of the Committee on the Relation of Public Libraries to Public Schools exceedingly valuable at this time; and

WHEREAS, The wide dissemination of this report among the teachers of the country cannot fail to be of value in awakening additional interest, and in giving useful information concerning the extension of library work in the public schools; therefore be it

Resolved, by the Library Department of the National Educational Association, That the Executive Committee of the National Educational Association be urgently requested, in the exercise of the discretion allowed them by recent action of the Board of Directors, to have not less than 10,000 copies of the report of the Library Committee printed for free distribution thru the Secretary's office, so as to reach the largest number of teachers possible; and that an edition be printed and offered for sale at cost and in such quantity as to supply whatever demand may arise.

Resolved, That the officers of the Library Department of the National Educational Association be, and are hereby, constituted a committee representing the department, and are instructed to prepare a circular letter to state superintendents calling attention to the report of the Committee on the Relation of Public Libraries to Public Schools, and inviting their co-operation in securing and distributing the report among the teachers of the several states. And be it further

Resolved, That such circular letter should set forth the importance of arousing an intelligent interest among teachers and library managers in the work of extending the usefulness of the library, and also should present some suggestive plan for the organization of the work in each state.

The resolutions were unanimously adopted.

A committee on nominations was appointed, consisting of J. H. Van Sickle, Denver, Colo.; Miss Willard, Carnegie Library; Miss Mary L. Jones, Los Angeles, Cal.

Miss Mary L. Jones, of Los Angeles, read a paper on "School Reading thru the Public Library."

A paper entitled, "How to Acquire a Taste for Good Reading," was read by Elizabeth Skinner, Denver.

"The Use of the Library" was the subject of an address by C. C. Young, San Francisco, Cal.

Discussion followed the reading of the papers.

The Committee on Nominations submitted the following report:

For *President* — Sherman Williams, Glens Falls, N. Y.
For *Vice-President* — Mrs. Harriet Child Wadleigh, Los Angeles, Cal.
For *Secretary* — Elizabeth Skinner, Denver, Colo.

Department abjourned.

ELIZABETH SKINNER,
Secretary pro tempore.

PAPERS AND DISCUSSIONS

THE FUNCTION OF SCHOOL SUPERINTENDENTS IN PROCURING LIBRARIES FOR, AND THEIR PROPER USE IN, THE PUBLIC SCHOOLS

BY ALFRED BAYLISS, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SPRINGFIELD, ILL.

For the purpose of this discussion, superintendents may be grouped in three classes: (1) superintendents of schools in cities having good and growing public libraries; (2) superintendents and supervising principals in towns and villages without public libraries; (3) county superintendents, whose work and interests are nearly or quite altogether with the rural schools.

In general, office-seeking does not correlate closely with the supervision of education; but if a school superintendent knows that the office of director of the public library is chasing him, he ought not to run away from it; if he even surmises that the said office is seeking a man, he ought to put himself, or a conscript in the person of his best-adapted principal, in a position to be very easily found.

In the beautiful and progressive city of Rockford, Ill., there is a most excellent public library. The population of Rockford is nearly 30,000, and the library contains over 30,000 volumes. The president of the library board is principal of one of the schools. For years teachers have enjoyed the special privilege of drawing from the library as many as ten books at one time. During the past year, at the instigation and under the immediate supervision of the principal-president, and, it is needless to say,

with the co-operation of the superintendent, convenient cases of carefully selected books have been prepared, and teachers of any grade, from the fourth to the eighth inclusive, can now draw a whole library at a time, and when that has served its purpose, exchange it for another.

Mr. Barbour, who is the soul of this plan at Rockford, gave me the following notes, which he said had been handed to him by teachers before the little libraries had been in use three months:

1. One boy who has been in the habit of spending several evenings each week down town on the streets became very much interested in the books that he had drawn from the library sent to his room. Two or three weeks after the books had been put into the school he told his teacher that these library books were *better than a curfew law* for him, for he had not been down town an evening since the library came into his room.

2. In another school a little colored boy, by his almost utter disregard for the rules of good order and the neglect of his work, had become a disturbing element in the school, and his teacher was getting not a little discouraged with him. One day the subject of "heroes" was being considered. Several pupils had told of heroes they had read about among them Grant, Sheridan, and Dewey. Soon the teacher noticed this boy's hand raised. She called upon him. He said: "I can tell you of a hero." Given permission, he stood, with eyes sparkling, and told the story of one of the old Greek heroes, which he had read in one of the library books. Since then he has been much more interested in his work, and his conduct is very much improved.

3. Many of the parents and older brothers and sisters of the pupils, who were not patrons of the public library proper, have become interested in these books. Pupils frequently ask their teachers for an extension of time on their books, so that other members of the family at home may read them.

So much for the first class. This example indicates the least the city superintendent should do, or cause to be done, as well as at least one use of the library in the school. The library, rightly used, will certainly reinforce the school in that part of its work which counts most toward the "conduct which is three-fourths of life."

But in all Illinois there are not half a hundred libraries equipped to thus reinforce the school. What state has a growing library and a live librarian within reach of every graded school? May I cite another concrete example from Illinois in illustration of what may be done under other conditions?

Yates City, Ill., is not a city at all. It is a beautiful little village of fewer than eight hundred people. The school has four teachers, counting the principal but once. Twenty years ago the school took the premium for something or other at the county fair — ten volumes of Rolfe's classics. These books suggested more books. So then the principal proposed that each pupil give to the school, to form a library, one book which he or she had read and found interesting, and added that the name of the donor would be written on a label and pasted in the book; result, fifty volumes, all readable. Then followed some talk to the citizens about a village library, some of whom discouraged the project; they had seen it tried and fail; rent of a suitable room, fuel, janitor's work, and librarian's

services would cost so much there would be a deficit long before books could be bought. But the principal was young, and in his lexicon "fail" had not yet been written. There was that vacant recitation-room. The board said he might have it. That canceled three items, and he elected himself librarian, without salary, and thus canceled the fourth. In this way every dollar raised became available for the purchase of books. He named it the "School and Public Library," and it proceeded to thrive. There was a Thanksgiving festival, and everybody who bought two tickets to the festival was given one library card, good for a year. There was a literary and musical entertainment connected with the festival, but — and this indicates the business sagacity of the young man — there were no free tickets to anybody, not even to the manager. All work was done from a motive of loyalty to the school and the village. "This," he said to me, "brought in only the capable, energetic, and generous workers, and the public, knowing this fact, I think, were much more willing to contribute when they knew nobody was dead-headed. Those who did the work donated it, and paid for admission the same as those who did nothing." Ten days after the festival the books were selected, purchased, and in circulation. There were books of biography, history, travel, and standard fiction, and everybody wanted to read. Moreover, there were *Izaak Walton*, *Sports Afield*, *The Still Hunter*, and *The Game Birds of America*, all classics, but put there chiefly as "bait" for two or three influential men of means who had certain tastes of their own; and it landed them, for that type is usually generous, and the library thus made fast friends of them. That Thanksgiving festival has been repeated twenty times. It wears well, for it remains the event of the year in that little community.

The library has grown from ten to two thousand volumes. It is open to the school every day and to the community every Saturday from 2 to 4 P. M. The principal continues to act as librarian without salary, and the present principal has indulged in a "card catalog under a somewhat modified form of the expansion system." He issued last year, on Saturday afternoons, nearly two thousand books.

As to their use in the school, the founder[1] of the library says: "We made daily use of the library in connection with almost every subject, but especially geography and history, and many a day I have helped put back upon the shelves more than fifty volumes that had been consulted by the pupils of my room." If geography is the story of man's effort to realize himself thru his environment, and history the same thru institutions — instead of bounding states and memorizing dates — who shall estimate the value of that little library, with its 300 histories, 254 biographies, and 141 books of travel, for the purpose of adding flesh and blood and color to the dry bones of the text-book?

[1] Superintendent W. L. Steele, now of Galesburg, Ill.

In the rural districts of Illinois there is just now unusual activity in procuring school libraries. This is justly attributable, I think, to the current set in motion by this department at Buffalo, three years ago. Nearly every county superintendent is earnestly pushing some plan or project for a library in every school. Every conceivable plan for raising money which the enthusiasm and ingenuity of teachers and pupils have been able to devise, with variations, has been tried somewhere: literary, musical, social, and "mixed" entertainments; box, basket, pie, oyster, and plain socials and suppers; subscriptions of money from a penny up; book receptions, spelling matches, auctions, and scrubbing bees — that is, in a number of cases, the pupils scrub the schoolroom floors and wash the windows, for the benefit of the book fund. In one county an enterprising young teacher went to a merchant about Christmas time, got a supply of Bibles, photograph albums, and other "holiday goods," and at the close of a short concert, or something, auctioned them off to the highest bidders, and realized $8 in commissions for the benefit of her school library.

Some superintendents are of the opinion that these devices are detrimental to the school, tending, as they easily may when overdone or mismanaged, to interfere with the regular business, and that, therefore, books should be purchased with money appropriated for that purpose by the board. Others think that the educational value of the idea of self-help more than compensates for all necessary interference with the stated program. Each superintendent or teacher must work that problem out for himself. For my own part, I remember reading in my home paper, not long ago, the following item:

> An entertainment was given in the town hall at Kangley last night by the pupils of Lloyd Painter's school, and the net receipts were $38. This sum will be used to purchase new books for the school library recently started by Mr. Painter. The hall was packed to its utmost capacity, and the program was an excellent one throughout. *Until this library was started many of the pupils had never read a book through except their schoolbooks.*

Lloyd Painter is but a boy schoolmaster and Kangley but a little mining village. The children are, many of them, foreign-born, and nearly all of foreign-born parents, mostly Slavs. The entertainment may have interrupted the routine of the school, but the interruption might easily be justified on other grounds than the need of money to buy books. But if the $38 worth of books to read, and that solely for the mere pleasure of the reading, were all, the justification is ample.

The Illinois county superintendents are almost a unit in certifying to the value of a sufficient number of good books in their schools. I quote the language of two. The superintendent of Peoria county says: "I think that no other one thing has advanced and helped the schools of the county as much as the introduction of the 'Pupils' Reading Circle' into our schools." The superintendent of La Salle county says that

wherever he has been able to place libraries he finds "better conduct, greater interest in school work, ambition to advance in the intellectual life, and greater interest in the school by parents who read the books or hear them read."

My conclusion, therefore, paraphrasing the familiar phrase of an almost forgotten philosopher, is that the function of school superintendents in procuring libraries for the schools is to procure them, and preferably by a method which involves some form of self-help and sacrifice on the part of those who are to use them. The city superintendent should be identified, either in person or by proxy, with the public library, with the clear purpose of limiting its abuse and extending its wise use by both teachers and pupils. The public library, wherever it exists, should be a tributary ally to the public school. In communities without a library the superintendent or principal should forthwith establish one. In the rural districts there should be books for reading and reference in every school, and it is the easy and delightful function of the county superintendent to see that his teachers devise ways and means for procuring and circulating and caring for them, or move on into an adjoining county. Again, because there are books and books, it is the function of the superintendent to know the one from the other. Is it too much to say that he should read, or cause to be read by a competent judge, every book selected? There should be books of reference, books for supplementary reading in connection with all studies, books for culture, and books to be read for recreation — the mere delight of reading — and "he should know which are which," for "books can never teach the use of books."

The use of the library in the school is threefold. It clarifies the understanding, contributes to the joy of living, and is the most effective ethical instrument available.

Reading extends observation, stimulates thought, and corrects them both; hence, it is a prime factor in clearness of vision, either mental or moral. It is almost certain that the intellectual capacity of man has not increased for a thousand years, but it is quite certain that the cultured man of today has an immense advantage over his intellectual equal of a thousand years ago, because of the wealth of accumulated knowledge and thought stored in printed books. To be sure, it is undeniable that, without reading, a man whose observation is reliable, who sees clearly and thinks logically, may become the master of broad acres. He may be shrewd and "deep"— enough so to rent his farms and move into town; but his shrewdness and depth may be, and sometimes are (as I happen to know), entirely compatible with a narrowness that permits him to scheme to keep down the school taxes upon the fields he has abandoned.

And O, the pleasure of reading! Our saddest failure in teaching is the hopeless attempt to *cram* mere information into growing minds in measured quantities, against time, prematurely, and then to pump it out

again with the "test" pump, without loss in quantity or quality. Such a process is not education. Education is the process of interesting. Likes and dislikes have a bearing and a value that cannot be ignored. "Give us, O give us," says Carlyle, "the man who sings at his work. He will do more in the same time, he will do it better, he will persevere longer. One is scarcely sensible of fatigue whilst he marches to music." But who can sing except the man whose mind is filled? The man whose head is empty can, at the utmost, merely *whistle*. If the pleasure to be derived from books, the added disposition as well as ability to sing at one's work, were all, it would amply vindicate everything we are doing to make the children acquainted with, and to teach them how to use, them.

But the chief end of man is not happiness. Books rightly chosen and rightly read will certainly throw over our lives great floods of "the light that never was on sea or land," but their full service goes farther than that. "Every animal of the barnyard, the field, and the forest, of the earth and the waters under the earth," says Emerson, "has contrived to get a footing and to leave the print of its features and form in some one or other of those upright, heaven-facing speakers. Ah, brother, hold fast to the man and *awe* the beast: stop the ebb of thy soul — ebbing downward into the forms into whose habits thou hast now for many years slid."

So the highest use of the library is an ethical one.

"We come, then, to the great concourse of the dead," says Ruskin, "not merely to *know* from them what is *true*, but chiefly to *feel* with them what is righteous." "Men are criminals," says De Garmo, "because they have not imagination enough to see the inevitable consequences of their misdeeds."

But most of us might better "bay the moon" than depend upon direct and didactic methods in teaching ethics. If the education which makes for the conduct of life depended upon that, its influence would be altogether insufficient. In this part of the work we must proceed by oblique methods. To this end, there can be no manner of doubt as to the value of books. Do you want to teach a boy mercy and kindness — to "love all things both great and small, as he loveth who loveth best"? There are *Black Beauty*, *The Dog of Flanders*, and *The Nürnberg Stove*. Do you want him to love his own above all other lands? There is that marvelous "Address at Gettysburg." Would you guard him from the drunkenness that may come with too great national power — from "frantic boast and foolish word"? There is the "Recessional":

> The tumult and the shouting dies —
> The captains and the kings depart;
> Still stands Thine ancient sacrifice,
> An humble and a grateful heart;
> Lord God of Hosts, be with us yet —
> Lest we forget, lest we forget!

In short, whatever we do to inculcate the love of liberty, truthfulness, patriotism, piety, patience, gratitude, reverence, philanthropy, fortitude, and to subdue such passions as anger, avarice, envy, jealousy, hatred, revenge, pride, and vanity — to "hold fast to the man and awe the beast" — can best be done — can, perhaps, be done in no other way than — thru home, school, and public library.

Lastly, one book owned is equal to several borrowed. Every man is rightful heir to a share of the culture of his time, but he cannot come into full possession of his estate until he owns as well as reads a few good books. "No book is serviceable until it has been read and re-read, and loved and loved again; and marked so that you can refer to the passages you want in it, as a soldier can seize the weapon he needs in an armory, or a housewife bring the spice she needs from her store." (Ruskin.)

The final cause, then, of all our work to develop the interest in books, and to train children to read them, should be to lead them to know, select, and become the *owners* of books, some of which at least should not only be real books, but well bound, printed from clear type, on good paper, with broad margins; standards of taste as well as sources of happiness, virtue, and strength.

There is a story which comes to me very often, to the effect that in an old Irish cathedral there is a chime of bells made years ago for an Italian convent by an enthusiast who took up his abode near the convent to enjoy their melody. Time and chance made the man a wanderer. He became old. His wanderings brought him to Ireland. Just at sunset, at the close of a rare day in June, as the vessel that bore him floated down the bay, there came a peal from the cathedral tower. No other bells were like these. The memories of other days, home, friends, all things he loved and cherished were in their sound. He lay back in the boat. When the sailors saw him his eyes were sightless. His wanderings on earth were ended by the sudden tide of sweet memories which had snapped the chords of his heart asunder.

So our work in reading ought some day to be a memory *chime* which shall ring back into the hearts of those for whom we toil, as they journey thru life, only sounds of sweet concord. Unlike the Limerick bells, such a chime cannot be separated by any reverse of fortune from its owner, but in all his wanderings, whether up or down the earth, it will ever be with him; and let his occupation be what it may, he will be a man who "will sing at his work."

DISCUSSION

[REPORTED BY MISS L. P. SWAN, WHITEWATER, WIS.]

S. P. McCREA, Bisbee, Ariz.— Only a few schools in the larger towns of Arizona have libraries or access to public libraries. In Bisbee a public library of 5,000 volumes lends a noticeable influence to our pupils and teachers. Next year we have planned to have each grade teacher have from twenty to twenty-five books on her desk and let the pupils use them freely. This matter does not receive the attention that it should.

L. D. HARVEY, Madison, Wis.— The superintendent must do his best work thru his teachers to interest the pupils in books. He should lead his teachers to see that they cannot stimulate pupils to read unless they themselves enjoy the same books.

No one gets help out of a book; it is what the book gets out of the reader that is helpful. The teacher must both know the book and know what the child is prepared to read understandingly.

This year at the institutes in Wisconsin model country-school libraries are to be used, that teachers may learn how to make best use of them in their schools. We already have libraries in nearly all schools of the state; where there are none, book dealers might loan books to the county superintendent for institute use. In one place in the woods of Wisconsin an enthusiastic teacher, who could get no money for books, asked her pupils to bring an egg each day, and soon had enough to realize $1.50, which she expended for books.

S. E. BUSSER, superintendent of reading-rooms, Santa Fé system.— Every boy should own a book and have his name in it. Boys in every town will take an interest in collecting money for books. Reading-rooms are established every 200 miles on the Santa Fé route; 40 per cent. of the books are fiction, 40 per cent. history and biography, and the rest poetry, science, and the like. Daily, weekly, and monthly periodicals are furnished, and all railroad employés and their families have free use of these reading-rooms.

Bath- and amusement-rooms are often provided. Lectures and social entertainments are given. Railroad employés are easily persuaded to read, and teachers who can work with the young should be encouraged by this fact.

SCHOOL READING THRU THE PUBLIC LIBRARY

BY MISS MARY L. JONES, PUBLIC LIBRARY, LOS ANGELES, CAL.

In opening a discussion before this particular body, it may not be out of place to quote the words of a prominent librarian, setting forth the aims of the Library Department of the National Educational Association:

It is hoped that a library school section . . . . will discuss the advisability of placing small circulating libraries in schoolrooms, there to be under the teacher's entire control; it will urge the increase of the number of books placed in every schoolroom to aid the teacher in her work; it will urge the increase in number and size of schoolroom reference-books for the use of the pupils; it will advocate the giving to every pupil, by means of such libraries, a working knowledge of books, a beginning of experience in the laboratory method, an apprehension of the fact that out of books he can always correct his

own and others' passing ignorance, and can sometimes get out of them a glimpse of wisdom; it will look with a critical eye into the size of the average high-school reference library, and the lamentably small and ill-directed, or undirected, use made of the same; it will take hold of the subject of outside reading in the high-school grades, and will attempt to settle the question of what and how much; and it will, we trust, help to unite and strengthen the good work of placing the right book in the right hands, along all the many lines of that work which are common to associations of librarians and associations of teachers. (J. C. Dana, in *Library Journal*, Vol. XXI, p. 134.)

It is fortunately not necessary to consider the advisability of special reading outside the regular school curriculum; neither is this the place to set forth the possibilities of the public library as an adjunct of popular education; but granting the place of reading in the scheme of common-school education, granting the existence of the school library together with that of the public library, it may not be unprofitable to inquire into the best means of bringing about, thru both of these institutions acting in harmony, the best results to the greatest number with the least expenditure of money and work; or, as the motto of the American Library Association words it, "the best reading for the largest number at the least cost."

Both institutions are making efforts equally heroic to bridge over the chasm between formal instruction and a firm mastery of "the best that has been thought and said in the world." A stronger appreciation than ever before prevails in the schools today of that supplementary work which is too elusive to be reduced to a science or system, which cannot be graded, and upon which no per cents. can be placed by the most expert examiner. In some of our large cities, libraries have taken up school work, conducting night classes and doing special work along technical lines. But this is in localities and among people beyond the reach of the common schools. Such movements are merely temporary encroachments on the part of the library into the school domain. To say that there is a lack of harmony between the public library and the public schools generally would be vastly overstating the case. But in many instances the school library is duplicating the work of the public library. It goes without saying that small collections of books can never accomplish the work of the larger collections; likewise that the cleverest men and women trained for one branch of educational work can never successfully accomplish the work of another. The waste in energy, time, and money in the smaller towns and cities supporting the duplicate system is truly deplorable. But, aside from its extravagance, it reacts unfavorably upon the children themselves. Taught to read from the school library alone, on leaving school they have not developed what might be called a public-library habit. Too few of our people, cut off from school privileges at an early age, or graduating immaturely, find their way to this most generous of *almae matres*, which Carlyle so fittingly calls the "people's university."

It is plain to any casual observer that the school and the library are working by different methods toward the same end. The lines of work

are parallel, and there must be innumerable cross-lines from one to the other. In many instances, under state or county direction, or frequently by individual endeavor and private philanthropy, a correlation of forces has been brought about. But much remains to be done. The experimental stage is not yet passed. A single board managing both institutions is surely not the best system, as has been proved in states where the custom prevails. Successful work has been accomplished in spite of, rather than because of, the combination. The old-time district libraries, which have practically become school libraries, have surely not fulfilled the purpose for which they were instituted. A comparison of the work accomplished in the state of New York by the public libraries department of the university with that of the district libraries is proof enough of the statement. In many of the cities excellent work is being accomplished, based on the mutual good-will of the public-school teachers and the library staff. It is obvious that any work which rests on such a basis is more or less unstable and in that respect unsatisfactory. The best results can be obtained only by a systematic union of forces.

Perhaps as successful a plan of co-operation as any is being followed out in Los Angeles. In California a very generous school-library system is provided for by the state law. For the past seven years, under a somewhat generous interpretation of this law, the boards of the public schools and public library respectively have co-operated most successfully. Not only has there been a marked economy in the expenditure of funds, but the object of all libraries, public or school, has been attained: the right book has surely been placed in the right hands. The law is interpreted to apply to the first nine grades only, and is as follows:

> In cities not divided into school districts the library fund shall consist of a sum not to exceed fifty dollars for every one thousand children or fraction thereof of five hundred or more, between the ages of five and seventeen years, annually taken from the city or county school fund apportioned to the city. . . . . Libraries are under the control of the board of trustees or city board of education. (School Laws of California, 1714–15.)

Up to 1892 library money was apportioned directly to the various schools in this city, the county board maintaining legal supervision. The books thus purchased took the course of the average school library. Some teachers made most intelligent use of this provision; others disregarded it entirely. Unavoidable losses were inevitable, and valuable works were needlessly duplicated. Thru the summer vacations the school library lay in a state of innocuous desuetude. During these years, however, a strong library board, with an exceptionally able librarian, was building up in Los Angeles one of the most efficient public libraries in the country. The first step toward co-operation with the schools was to grant to pupils in certain grades the privileges of the library without the fees charged to other members. In 1891, however, the library was made

free to all residents of the city. During the year following the present system of co-operation was inaugurated. All books belonging to the school libraries at that date were deposited in the public library, and have been administered as a part of it from that time. Additions have been made from time to time, as formerly, from the county fund. As in other cities of the country, all purchases are made thru the board of education from the list adopted by the county board. This list is, of course, in a constant state of revision. Works thus acquired are practically an integral part of the public library open to all readers, whether connected with schools or not. On the other hand, all books belonging to the public library are at the disposal of teachers, whether purchased from school money or public-library funds. Thus is secured "the best possible reading for the greatest possible number at the least possible cost."

A most wholesome condition of mutual helpfulness is the result. In the library the school and juvenile departments are combined. Children are made most welcome to this well-stocked room. Papers and magazines, books and pictures, flowers and sunshine, with willing attendants, make it the most attractive room in an overcrowded building. The principal of the school department is a regular member of the library staff, with assistants as needed from the force. Under regulations adopted by the joint action of both boards, books are taken to the schoolrooms for the use of teachers and pupils. Briefly stated, these rules are as follows:

Books to the number of twenty may be taken by each teacher. These may be retained four weeks, subject to renewal. Selection is made by teachers on Saturday and Monday; collections and deliveries, under the direction of the superintendent of school buildings, on Wednesday. For convenience the city is divided into four districts, each changing its books on a fixed day of the month.

In the schoolroom the teachers may do with the books what they will, but they are usually loaned to the children for home use. Pictures, chiefly photographs of famous works of art, famous buildings, celebrated persons, etc., are loaned to the schools under the same rules as those governing the books. These are sent out either in frames to hang upon the wall, or in portfolios, to illustrate the course of study. It may be remarked, by the way, that the same collections of pictures frequently meet the wants of art classes and students in the city generally.

In the school department of the library are duplicate sets of reference-books which do not circulate, and in the schools are certain books of reference which do not leave the school building.

A portion of the fund has been spent on duplicate sets of the magazines, popular as well as pedagogical, which circulate among teachers only. A collection of the best works on education is also at their disposal.

To teachers in other than public schools of the city the library board grants special cards, upon which several books may be taken out at a time. This same privilege is extended to teachers of the public schools during vacations.

The library reserves the right of recalling any book from this school circulation, and at times of an epidemic of contagious diseases circulation thru the schools may be suspended.

This, briefly, is the plan which has worked with satisfaction for the past seven years in this city. Many details of its management would be of interest to practical librarians only. The economy and efficiency of the system may readily be seen. The principle of reciprocity involved is the basis of its success. The schools have the advantage of the trained staff in the library, as well as its entire collection of books. The library has the additional income of the purchase of books and some five hundred centers of influence in the schools.

But the possibilities of this union of forces are not at an end. An experiment is being tried in an unused school building on New Macy street, about a mile from the library. A room has been furnished and lighted at the expense of the school board. It is provided with a collection of some four hundred volumes, chosen mainly from the county list, with miscellaneous additions from the general library. A young woman, with assistants from the public-library staff, is in charge of this reading-room, which is open each evening from 6 to 9:30 o'clock. Another room in the same building is fitted up as an audience-room, and it is designed to hold educational entertainments from time to time, and to give courses of lectures, all of which are to be free to the citizens of that part of the city. It is hoped that other vacant schoolrooms thruout the city may be put to a similar use, and that a system of branch reading-rooms and delivery stations may be operated in connection with the schools, reinforced by lecture courses under the auspices of the school board and the University Extension Society.

In this way, we maintain, the schools and the library, working together in the utmost harmony, are accomplishing the maximum amount of good upon the minimum amount of money, time, and energy. The pupil not only has the public library brought to him every day in the schoolroom, but he is constantly reminded of the source from which so many blessings come. He is directed to the public library in such a way and at such a time that, when circumstances do force him from the public schools, he is already prepared for the people's university from which there is no graduation. It is hoped that the branch libraries in schoolhouses will emphasize another feature of the system; and that active library interest will reach from the children to the parents and elder brothers and sisters, that awakened interest in the homes will quicken the interest of the parents in the daily work of the children. As

a consequence, children will be retained in school for a longer time. According to the well-known theory of John Fiske, the infancy of the individual, thus prolonged, will result in a higher state of civilization than any yet attained.

HOW TO ACQUIRE A TASTE FOR GOOD READING

BY MISS ELIZABETH SKINNER, DENVER, COLO.

How to acquire a taste for good reading is a question of growing interest, not only to the parent and teacher, but to the nation ; for its life æsthetical, as well as ethical, is embodied in art forms, of which literary masterpieces are in the highest rank.

That which educates and elevates the youth of any land lays for it a foundation of strength and prosperity.

Horace Mann says : "If a boy reads of the friendship of Damon and Pythias, the integrity of Aristides, the perseverance of Franklin, the purity of Washington, he will think differently all the remaining days of his life."

It is a matter of statistics that more than 50 per cent. of the children leave the public school before the age of fourteen. The fact that the great majority of them leave without the slightest conception of the influence of books, and without any literary discrimination, should enlist the interest of every educator.

When a child has learned how to read, a vast storehouse opens up before him. On the one hand are means of culture, mental and moral ; on the other, possibilities of the deepest degradation. The inventor of the first printing-press realized this, for he said he quailed at the responsibility of giving to evil-minded men so mighty an engine of mischief.

The formation of the habit of reading is the vital question. Many who have given the subject careful study think it is infinitely better for a boy to read anything and everything he can get than to have no desire at all to read. Of this class there are not a few. The mind is, of necessity, active. If one be so unfortunate as to crave demoralizing literature, he will suffer no more from the reading of it than if he were left with his own thoughts. The average boy will not long be satisfied with chaff when wheat is everywhere in abundance. How much worse for a girl to read a book whose moral tone is far below what it should be than to spend the same length of time gossiping about her neighbor or idly day-dreaming ?

Where shall the work begin, and when ? In the home, by all means, and as early in life as possible. Who so well as the mother understands the disposition of her child ; who has a better opportunity of studying his

inclinations? Parents do not think of waiting till he is six years of age to teach him to be truthful, honest, obedient; they know too well the power of habit.

Story-telling, which naturally precedes reading, can be made of interest to children of very tender age. They can be taught to look forward with pleasure to a part of the day or evening when a good story is read or told to them. This is frequently done when the mother is in the mood to do so, or when she has time. It should be systematically done. She should put herself in the mood; she should take time, and take it daily.

Fifteen or twenty minutes cannot greatly interfere with the day's work or social duties. How many hours are spent for the adornment of the body while the mind craves food! When your daughters have grown to womanhood, they will not remember whether their little dresses were made of sheer linen or domestic gingham. Your young men will not care whether the ruffles on the waists they wore in boyhood were stitched by hand or machine, but they will remember the walks and talks, the stories and books, that did so much to make childhood happy.

Many objections are made to fairy stories on account of the improbability and, in many cases, the impossibility of the conditions. It is thought to be a great mistake to say "the dish ran away with the spoon," or "the cow jumped over the moon." We may say a dog can bark, but not laugh; and yet the poets we love best tell us of the whispering tree-tops, the murmuring brooks, and the laughing rills. If it were not for images formed by his own fancy, a child's life would be a barren waste. What would the inventor, the artist, the poet do without imagination? Let us be generous with childhood, generous as Alexander with his Thracian robber, when he said: "Take off his chains, and use him well." Let us take off the chains of children, and let them revel in the realm of imagination. It is theirs by right of inheritance. When nature gave this power to her children, she gave of her choicest gifts.

To those who object to fairy tales there is no dearth of material, if parents will but use it. Children are born naturalists. Their hearts turn to birds, beasts, and flowers, as leaves turn to the light. Nature furnishes innumerable avenues where they may wander with pleasure and profit. Children have preferences, too. Some enjoy travel, others biography, still others science. Indeed, it makes little difference as to the particular book read; it is the class of reading. The teacher has a work that the average mother cannot do. Children's books are publications of later years, and few mothers have time to acquaint themselves with many of them. It is part of a teacher's work to do so.

Too much cannot be said in favor of school libraries, especially room libraries. They are an advantage to the child, the teacher, and the home.

A vast amount of time is squandered in many schools. Tasks requiring fifteen or twenty minutes of solid study frequently take twice

as much time. If a boy knows that he has the privilege of reading when his lessons are prepared, he will make the best of his time.

His association with books, his judgment in looking up references, his depending upon himself to select what he reads, all help to make him strong.

The literature of school libraries is taken into the homes; a deeper interest on the part of parents is aroused; and a warmer feeling for the school is the result. No money was ever invested that pays a higher rate of interest.

When parents feel that books for their children are a necessity instead of a luxury; when the adornment of the body gives place to the adornment of the mind; when home and school join hands in the uplifting of our children, then will a taste for good reading be established, and literature pure and ennobling will predominate in the land.

THE USE OF THE LIBRARY

BY C. C. YOUNG, LOWELL HIGH SCHOOL, SAN FRANCISCO, CAL.

I have at hand a little book[1] compiled almost twenty years ago, composed of papers nearly all twenty years old and more, in which are discussed, and well discussed, the identical questions that are at present occupying our attention. Every article clearly and forcibly presents the thought that those two great co-factors in the education of mankind, the public library and the public school, can most economically and most efficiently perform their offices only when working together in a well-ordered, well-adjusted union. In every paper the same needs are set forth, the same methods are suggested, the same ideals are pictured, the same hopes are raised, that we are today listening to during these sessions of our department. This was twenty years ago; yet today, with certain notable exceptions, the school and the library have never yet been joined in that union which the lovers of both had so fondly hoped and so assiduously labored to bring about.

The subject of library and school co-operation, then, is not one on which anything startlingly new can at present be offered. Neither is it possible to compress within the necessary limits of a single paper anything like an adequate presentation of even the oft-repeated truths upon a matter of such vast and far-reaching importance. Accordingly I shall take the liberty of modifying the very comprehensive subject assigned me, and shall discuss what seems to me to constitute just now the most vital and necessary phase of that subject, "The Educative Value of the

[1] *Libraries and Schools*, by S. S. Green. New York: F. Leypoldt.

Use of Books, and the Responsibility of the School in Inspiring and Directing that Use." The means of securing books and the methods of using them are both interesting questions, but, after all, they are only details, which, in these days of library activity, will work themselves out, if only a sufficiently strong desire to secure and to use them is engendered on the part of the teacher. "Where there is a will" there is always to be found a "way," and the excellence of the way will generally be in direct proportion to the energy of the will.

Ever since the librarian first realized that his mission was something higher than to be a mere custodian of books he has been earnestly and unremittingly seeking alliance with the teacher, his co-worker in the educational world. Time after time has the subject been discussed in his assemblages and brought forward in his journals. From a recent editorial in the official organ of his national association I read: "There is no more important, as there is no more interesting, part of a librarian's work than that dealing with the relations of the library and the school. It seems not too much to say that this is the most vital part of a library's administration. The library that has no connection with the local schools is neglecting its mission and ignoring its noblest opportunities."

So much from the standpoint of the librarian. He would doubtless claim, and could doubtless produce the strongest proofs of his claim, that the teacher has never yet met him half way. To be sure, in the case of certain wide-awake and progressive communities, as in parts of Massachusetts, Wisconsin, and Colorado, and in the case of certain individual teachers of many communities, this claim might be gloriously refuted. Still, on the whole, I think we must admit that, from all appearances, the teacher has never yet sufficiently strongly felt any necessity of joining in that alliance which the librarian has so long been striving to accomplish. It seems to me, moreover, that this apparent apathy must be due to the fact that the teacher has never yet felt any great burden of responsibility or consciousness of a privilege or duty as regards the directing of the reading of the young minds under his charge. Consequently, I believe that our first business, as members of the Library Department of this association, is to insist with all our might, in season and out of season, upon this thesis, viz.: The most important duty of the public school, beyond teaching the child to read, is to teach him what to read and *how* to read; properly to introduce him to the world of good books, and to give him an ability to discover for himself what is soundest and best in literature. To enlarge upon this thesis, then, shall be our aim today; and I am very sure that it will prove defensible from the standpoint of fundamental pedagogic principles.

The drawing out of the child's latent powers and faculties, his physical and intellectual, moral and spiritual development, is a product, not of the school and the teacher, but of many factors, as diverse and

complex as is society itself. Moreover, these educative forces are present, not alone for a single brief period, but thru all the years of man's existence and of the mind's and soul's activity. A school whose organization is such as to disregard these great truths can never take the high position it is designed to occupy. Yet how many schools are so planned and so carried on that the pupil feels only the drudgery and the humdrum of a round of duties, which, so far as he can see, has little earthly connection with the life he expects to live! And how rarely do we meet the boy who, as he goes out into the world, continues of his own volition those studies which, so short a time before, were deemed the necessary and all-important factors of his development! The school, and after that life and the *world*—this fallacy is at the very bottom of the matter. The school does not "prepare for life;" the school is a part of life.

Once granted that the contention is correct that education is not for the few years of a limited school course, but for life, and that the chief function of the school is so to arouse the child's interest and direct his endeavors as to insure a wise and constant future self-education, I think we shall admit that it is not far wrong to say: "This implies that education must be carried on by means of reading." I judge that no great stress need be laid upon this point in an assemblage of this kind. That systematic, well-chosen, properly directed reading is an almost indispensable factor in the training of the mind needs little proof. Its influence in forming correct habits of thought and research, broadening the horizon of the reader, overcoming narrowness and provincialism, quickening the sympathies, awakening the imagination and æsthetic sensibilities, bringing out the ethical consciousness—in short, developing that fullness of culture and roundness and nobility of character which are the prime ends of education—all these are too clearly appreciated to require demonstration. As Dr. Harris has so well said: "It is thru literature that the genius of the race, appearing in exceptional individuals, instructs the multitude, educates man's insight into the distinction of good from evil, reveals to him his ideals of what ought to be, and elevates the banner of his march toward the beautiful good and the beautiful true."

If, then, the reading of good books is so educative in its tendency and so essential to sound development, at what period in the life of man is their properly directed use so important as that at which he is most susceptible to the influences of education? During the years of childhood and youth, when the interest is so easily aroused, when the sympathies are so keen, when the mind is so open to impressions, and the memory so tenacious in retaining them; when the tastes are yet unperverted, and the capacity for forming ideals is so strong; when the natural appetite for reading is so marked, and when the conditions of life give so much leisure to indulge it—at this time, if ever, is there necessity for wise and skillful guidance in the use of books. This necessity is emphasized all

the more by the fact, so constantly evident to all of us, that the reading habits which the child acquires will, for the most part, be identical with the reading habits which the man possesses. A love for the best in literature in most cases comes in childhood, if it comes at all. Consequently, the assistance given to the child in this regard is, perhaps, more efficiently educative than any other form of instruction; for what we are giving to the boy and the girl of today is really given to the man and woman of the future.

That children are at present receiving no such aid is clearly shown by numerous investigations along this line. Without entering into the details of these investigations, I think that I may safely sum them up by saying that not 50 per cent. of the children who are in the habit of reading at all are favored with any real guidance respecting either the nature, the quantity, or the method of their reading. In this, perhaps the most potent of all influences upon the child's development at that adolescent period which is conceded to be the most critical of his life, he is left to wander blindly and aimlessly, absolutely in the dark.

Now, just as it is true that good reading is a positive good in the education of man, so is it also true that bad or slovenly reading is a positive evil. Hence arises the imperative necessity of looking after this matter at that period when the mental habits of a lifetime are being formed. For, as we have seen, children, if left to themselves, will not choose the best reading, but will too frequently choose very bad reading. Who, then, must undertake this supervision?

There are two, and only two, organized institutions whose business it is to look out for the education of the child. These institutions are the home and the school. Consequently, the direction of this branch of the child's education must fall into the hands of either the parent or the teacher. But experience has proved that to rely upon the parent for this is to lean upon a broken reed. If the choice of the child's reading is left to these natural advisers, thru lack of time and interest, or thru ignorance on their part, it will, tho sometimes made wisely, frequently be made very unwisely, and still more frequently be made not at all. At least these three things must be possessed by him who can successfully direct the reading of the child:

1. An understanding of the child mind as distinguished from the adult mind, and an appreciation of its needs and desires at various stages of its growth.

2. A knowledge, not only of literature in general and the principles which underlie it, but more especially a knowledge of the mass, content, nature, and comparative value of the literature adapted to children.

3. An opportunity and ability of scientifically observing the effects of various kinds of reading on children, both individually and in masses, and of correlating this general reading with the special studies, such as

history, geography, and the like, which are taking up the child's attention. It is scarcely necessary to point out that the average parent, even if disposed to give the time, is by no means able to meet all these requirements.

If, then, it is true that the child must have the help of books properly to educate him, and if he cannot, unaided or aided at home, determine *what* to read, and, what is equally important, cannot learn *how* to read, in the proper sense of that term, then the proposition that the school must lend a helping hand will scarcely need proof, for the very necessity of the case makes the work devolve upon it. Its duty, which I have mentioned before—that of co-ordinating, as far as possible, the varied factors which go to make up the pupil's education—still further emphasizes its responsibility.

To aid the child in choosing his associates is largely outside the power of the school; the home and the church are jealous of their rights; but that other great educative force, books and their choice, belongs to the child's mental life, and must in all reason be looked after by the power that has the general supervision of his mental growth. The choice and use of books should come under the province of the school. To it the pupil should be accountable for what he reads and how he reads. From it he should get the advice, the inspiration, the foundation of taste, which will make him a wise and careful reader.

Thus it devolves upon the school to see to it that the best and most suitable books are placed before the child, and that his interest is aroused in such a way that he will read them; and, still further, that he will read them in such a way that there may be formed in him a correct taste for books and a correct reading habit, which he may ever take with him as the most precious gift of the school system, and which he will inevitably transmit, at least in some degree, to the generations following him. I should like to see this study of literature the very center around which the work of the school revolves. I would have a course of study so arranged that the child may devote much of the time which so many schools now give to the spiritless and uncomprehending acquisition of dead and dissociated Gradgrind facts to the flesh and blood and life of the never-dying masterpieces of his mother-tongue. I would have him, from the earliest possible moment, begin to realize that there is a world outside the sphere of his small activities, that there is a glorious past of which he is the heir, and that that world and that past have left to him for the asking treasures which he can here and now begin to gather, but whose infinite richness he can never exhaust. And I would have him so directed that during his whole life's reading he may, both artistically and ethically, learn to know the good from the bad, and become accustomed of his own knowledge and volition to choose the good because it is good and to reject the bad because it is bad.

But in order to be able to attain these ideals the schools must have books — books far in excess of the reference works or supplementary text-books which the school library is able to supply; and for these they must turn to the public library. So important does this latter factor become that the school in a certain sense appears to be merely an adjunct to the library. That I may not appear too extravagant in this statement, I will here appeal for aid to our honored Commissioner of Education. Says Dr. Harris: "The school is set at the task of teaching the pupil how to use the library in the best manner — that, I take it, is the *central object* toward which our American schools have been unconsciously tending." Words as forcible as these, uttered by the head of American schools, and backed up by the scholarly, thoughtful, extremely conservative nature of the man who gave them utterance, cannot fail to have their weight.

So to the library we come as teachers, and to our gratification find not only the door open, but the most cordially welcoming hand stretched out to greet us. The library wants trained readers; we are seeking to train readers. No wonder, then, that we are gladly welcomed. And to the librarian, whose province it is, we may safely intrust the methods by which the books shall be put into our hands. Whether he adopt the Worcester plan or the Denver plan or the Milwaukee plan or the San Francisco plan will depend upon local conditions and restrictions, and, after all, really matters very little. Our business just now is not with the librarian, but with the teacher; our highest aim for the present should be to awaken upon his part a livelier interest in and a deeper insight into this, one of the greatest of modern educational movements.

DEPARTMENT OF THE EDUCATION OF DEFECTIVES

SECRETARY'S MINUTES

FIRST SESSION. — WEDNESDAY, JULY 12, 1899

EDUCATION OF THE DEAF

The department was called to order at 2 : 30 P. M. in Broadway Church, Los Angeles, with Mrs. Kath. T. Bingham, Palo Alto, Cal., in the chair. After brief introductory remarks by President David Starr Jordan of Leland Stanford Jr. University, papers were read on the following topics :

"Time Allowed for the Public Schooling of the Deaf as Compared with Hearing Children, and How to Make the Most of It," by Professor Charles S. Perry, California State School for the Deaf, Berkeley, Cal.

"All along the Line," by Mrs. Katherine T. Bingham, Palo Alto, Cal.

"Importance of a Right Beginning," by Miss Helen Taylor, kindergartner in Public Day Schools for the Deaf, Los Angeles, Cal.

"Vacation Schools for the Deaf," by Miss Mary McCowen, principal of Chicago Public Day Schools for the Deaf.

A general discussion followed by Dr. Warring Wilkinson and Professor O'Donnell, of the State Institution for the Deaf at Berkeley, Cal.; Miss West, of the State Institution for the Deaf, Mt. Arey, Pa.; J. A. Foshay, superintendent of city schools, Los Angeles, Cal.; Albert G. Lane, district superintendent of schools, Chicago, Ill.; Dr. William E. Waddell, president of Parents' Association, Los Angeles, Cal.

In the school exhibit, which was held in the Spring Street School building, this department was represented by only one school, the Los Angeles Day School for the Deaf. Here two groups of deaf children in charge of their teachers, the Misses Mary Bennett and Helen Taylor, gave brief class exercises on alternate days. At other times they explained to interested visitors the results of the regular class work of the year, as shown in the drawing, painting, writing, and other expression and construction work, which was exhibited in the room, and which elicited warm praise for its evidence of genuineness, originality, and artistic excellence.

SECOND SESSION. — THURSDAY, JULY 13

EDUCATION OF THE BLIND

The department convened at 2 : 30 P. M., with J. E. Carter, of Oregon, in the chair.

"In what Respects should the Education and Training of the Blind Differ from the Education and Training of Normal Pupils?" was the subject of a paper by Dr. Warring Wilkinson, superintendent of the State Institution for the Deaf and Blind, Berkeley, Cal.

Discussion followed by Professor Chappell, of the Minnesota State School for the Blind; Professor J. L. Carter, of the Oregon State School for the Blind, and Professor Charles Wilkinson, of the California Institution for the Blind.

THIRD SESSION. — FRIDAY, JULY 14

EDUCATION OF THE FEEBLE-MINDED

The department convened at 2 : 30 P. M., with Superintendent J. W. Jones, Columbus, O., in the chair.

Professor Thomas P. Bailey, of the University of California, read a paper on "Character Types among the Feeble-Minded."

At the business session the following-named were duly elected as officers of the department for the ensuing year:

For *President* — Warring Wilkinson, Berkeley, Cal.
For *Vice-President*, Subdepartment for the Deaf — Miss Mary McCowen, Chicago, Ill.
For *Vice-President*, Subdepartment for the Blind — E. E. Allen, Philadelphia, Pa.
For *Vice-President*, Subdepartment for the Feeble-Minded — Arthur C. Rogers, Faribault, Minn.
For *Secretary* — Edgar Allan Fay, Washington, D. C.

The register of the department showed the names of teachers of defective classes from twenty states.

The department adjourned.

MARY MCCOWEN,
Secretary.

PAPERS AND DISCUSSIONS

TIME ALLOWED FOR THE PUBLIC SCHOOLING OF DEAF AS COMPARED WITH HEARING CHILDREN, AND HOW TO MAKE THE MOST OF IT

BY PROFESSOR CHARLES S. PERRY, STATE SCHOOL FOR THE DEAF, BERKELEY, CAL.

A few weeks since, at a festal board spread less than a thousand miles from where we sit as members of a national council of educators, one of the business magnates of this state and country voiced his conviction that the youths of our land are drinking too deeply at the Pierian springs of knowledge; that, in fact, our American masses are getting over-educated, and that a fifteen-year limit should be set to student life. His assertion was emphatically seconded shortly afterward by no less a business authority than Mr. Russell Sage, of New York, who, under the old régime, "quit school and went into business at eighteen," and, as he modestly puts it, "has done very well." These somewhat startling expressions of opinion have, as you are aware, given rise to a good deal of newspaper talk and interviewing of prominent educators in this state and elsewhere; for, if California takes to herself pride in aught, after her ever-glorious "climate," it is in her broad-gauged and excellent system of public instruction. These opinions have generally been adverse to the utterances of our millionaire friends, and the consensus seems to be that

our present public-school age limits are not a day too long for the development of our present common-school and academic scheme of education. Such being the voice of the people, a discussion at this time and upon this occasion of school privileges accorded to our deaf, as contrasted with our hearing, youth becomes singularly opportune. This subject, if the writer states it from memory correctly, is worded in the form of a question assuming a fact, to wit: "Why should deaf children be allowed from five to ten years less time under instruction than their hearing associates?"

While the law in this matter, as all know, varies in different sections of our country, custom, if the writer mistakes not, is coming to allow to those charged with the education of the deaf large discretionary or advisory powers in defining the duration of their pupilage as wards of the state. Here in California, as Dr. Wilkinson informs us, the trend of legislation has steadily favored extension of this age limit, and year by year has aimed to make it correspond more closely with that of pupils in our hearing grades.

The same disposition has manifested itself in Ohio, where not very many years ago deaf children were fated virtually, in the majority of cases, to lose twelve years of life's most receptive period, educationally, unschooled at home. And it was a common and, to the thoughtful instructor, a most disheartening sight to see, in a class-room of beginners at that late age, young people approaching or beyond the opposed age line of twenty years present themselves for education. Five years was the time granted at that date in which to compass this momentous task, eked out in special cases by the grudging addition of two years more. Then followed, in 1867, under Dr. Fay, the admission of the deaf to school privileges at the age of ten, twenty remaining the final age limit. Seven years were allotted for the course, with three years more as a bonus in cases of exceptional promise. The year 1873 was signalized for the deaf of Ohio by further time concessions, the school being thrown open to all deaf youths of sound mind between the ages of six and twenty-one, thus approximating closely to the time law and custom obtaining in schools for hearing people. In 1881 the age of admission was set at eight years, a measure reluctantly taken, but necessitated by the overcrowded condition of the Columbus school at that time.

These statistics are quoted to substantiate the statement just made, that more and more latitude is being granted to educators of the deaf as to time limits. The sentiment of the public regarding us and our work may, in brief, be worded thus: "Take your own time, but give us the best results attainable;" and the question now before us is, not so much the gaining for ourselves, by public consent, of more time for our task, as how to make more of the time that already is accorded to us in advancing this great and growing work. As this is, or ought to be, an "experience meeting" for the interchange less of pedagogic theories than of actual and

approved practices in teaching our common profession, the writer may be permitted to describe, or rather to hint at, certain means to this end, to approve ourselves living agents in quickening and informing the intelligence of our pupils, thus most effectively stimulating their powers of expression, and so bringing them more and more into touch with those about them. The stream cannot rise higher than its source, nor can language outstrip the mental wealth and activity of which it is the exponent. Of course, we cannot expect our charges, as a rule, to be Helen Kellers in mental grasp and retentiveness, nor can they hope to be blessed, like her, with the individual companionship for an unlimited period of a devoted instructor. Yet the writer speaks from experience in maintaining that special methods and appliances may be made to aid vastly the development in our deaf children of this alertness of apprehension, this "catching-on" faculty, that distinguishes the "quick," perceptively speaking, from the "dead."

First, then, let the personal intelligence of the would-be instructor of the deaf be alert and sympathetic. "That which we are," asserts Emerson, that prince of teachers, "we shall teach, voluntarily, involuntarily." The heavy, unresponsive "logy" teacher—we all have seen and recognize the type—tho versed in all of the 'ologies, chirology included, has no call to teach the deaf. A little leaven, we are assured, leaveneth the lump; but be it little or much, leaven it must be; and tho that type of instructor may, under a long-suffering Providence and forbearing school boards, achieve a measure of success, it should not be at the expense of pupils already heavily handicapped in their race toward education's goal. In personal sympathy, after all, must we recognize the touchstone of successful teaching of the deaf—a sympathy quick to avail itself of every accredited aid to this end, contemning none; enlisting in this exacting service heart and hand, tongue and thought; a sympathy making itself "eyes to the blind," ears for the deaf; literally "feeling with" them the stress of their life-burden, while philanthropically striving to lessen its weight; seeking not private gains; broad and enduring in its nature as life itself. "Unless you expect to make instruction of the deaf your life-work, let it alone!" was the curt and wholesome advice of a veteran in our profession to the writer at the outset of his teaching experience. Again, let instruction be presented in the most attractive and condensed form possible to the deaf; knowledge in nutshells, as it were. In his own teaching the writer has found the use of card abstracts, historical, biographical, geographical, etc., to be a distinct time-saving. Such helps may be procured of educational publishers, or may readily be prepared by the teacher, and handled as teaching experience will quickly suggest. It has been amply proved that in this simple manner the memories of a class may be stored with grouped facts in endless variety, and, as they pass in review, unflagging interes may be maintained in the series thruout the school year.

The importance of having, close at hand, up-to-date maps, school apparatus, and compact reference-books in conducting this education thru the eye need not be emphasized in this company. In this connection may be instanced, however, the marked advantage which, during this history-making period thru which we are passing, the conveniently cased set of wall-charts provided by the state has been to the writer's own class of patriotic young people. Rarely has this case been allowed to remain closed during a daily session by these pupils; while, as their knowledge of localities widened, their interest in tracing the "course of empire" has fully kept pace with it. And the handy two-volume *Young Folks' Cyclopedia*, that lies within easy reach, has been thumbed like a "horn-book." Which facts simply demonstrate the desirability of enconomizing to the utmost the time of our youthful knowledge-seekers, by having such aids to information at hand in abridged form, rather than to expect pupils to consult authorities elsewhere; or, most likely, suffer this laudable impulse to verify facts to lapse, rather than tackle the ponderous encyclopædias that lade the shelves of some remote library.

As another means of keeping our young Americans abreast with the times in thought, do we, as a practice, make sufficient use of the morning paper in purveying material for journal-writing, taking it for granted that a daily class exercise of such sort is, as it should be, kept up? The tendency, as no doubt we have all observed with our pupils, is to grow introspective in their mental processes of this kind, making themselves and their personal affairs too exclusively the subject of their journalistic essays. Nor are they to be blamed, unless news matter of general interest, discreetly pruned of sensationalism, be provided to their hand, and their thoughts be led outward to note intelligently the march of current events. And this again suggests the query how we may most quickly induce in our pupils and confirm the reading habit upon which their future intellectual growth must so largely depend. It has for years been the writer's custom to keep a running record of the books read by pupils, by pages, the tally being from time to time announced, and summed up at the term's close; thus promoting emulation, among the members of the class not only, but between successive classes as well.

Systematically arranged wall cabinets in the class-room itself contribute wonderfully to the enrichment of those fleeting five hours a day we are privileged to spend among our neophytes. Properly classified and pigeonholed, here under the teacher's eye and hand, may be marshaled a store of material pat to "point a moral or adorn a tale;" or, mayhap, to suggest a ready solution for that recurrent conundrum of "What next?" which often perplexes the teacher ambitious to improve to its utmost the passing moment. The range of such illustrative collections is wide, and the emprise of it is to find how often, and in what unlooked-for ways, its resources are drawn upon.

A live query box should hold place among the furnishings of every well-equipped class-room for the deaf. To dispose our pupils to ask questions intelligently on the subject-matter before them is, as we all know, one of our hardest tasks. The desire is there, doubtless; otherwise they would not be Yankees; but a hesitation seems to lurk in their midst about putting this desire to know into words. Let this latent inclination of youth be fostered in every way and encouraged to declare itself. If the interrogation point be justly characterized as the "teacher's fish-hook," "turn about" here becomes "fair play," and if it be the fate of the unwary preceptor occasionally to get numbered among the caught, all the better for the pupil.

The practice has been found very helpful in teaching colloquial English of taking action words, for example "get," following up the term thru its Protean changes of application in getting "at," "around," "into," "over," "thru," "by," and "out of" things, even tho our disciples must enter with us the gates of slang in "getting there." But is it not into this very free-masonry of speech in "everyday clothes" that we should seek to initiate our candidates if we are ever to make them at home in the vernacular? This lead has been followed for months in one of our grades, with growing interest, and the class voluntarily petitioned that time be allowed it before term closing to copy the results of its researches for future reference.

The value of the facile crayon, as an auxiliary in teaching the deaf, should not be overlooked. The ability by a few deft strokes to outline to the eye a form illustrating, inartistically it may be, to the pupil the subject before him is one to be coveted and cultivated by every teacher. Yet, if the ready crayon be not at hand, a shape picture in ambient air may flash the idea with equal vividness, and far greater rapidity, aiding the judicious instructor effectively in securing that clear comprehension of a thought that must precede and pilot its expression in words. But we verge upon debatable ground — the limbo of gesture land! Environment, also, to use a hard-worked phrase, the social atmosphere of a well-organized and -equipped school establishment, is undeniably a powerful factor in drawing forth the dormant, or repressed, powers of the young and impressionable. This is acknowledged to be the case with normal youths, whose parents gladly incur the expense and self-denial involved in sending them away to distant boarding schools, for the sake of the educational associations they may offer. But notably is it true with our deaf children, the quickening of whose faculties, under class stimulus, at the very threshold of their school life, is ofttimes little short of marvelous, as every teacher of the deaf can testify. And can parents do less for their deaf than for their hearing offspring in thus putting them in the way of training to the best purpose, under time limitations, their hampered powers? Especially when the state steps forward and says:

"Come! I make these youths my foster-children; let them have all the advantages, for the time being, of the well-conducted private school, coveted for their hearing brothers and sisters, free of cost!" Can an enlightened and generous public do more? or less?

Yet, why catalog, here and now, educational considerations that should naturally suggest themselves to all thoughtful teachers of the deaf, who, pre-eminently among educators, find themselves confronted by problems and conditions calling for the highest originality in methods, as well as of patience beyond compare?

Upon this common ground, trained tho we may have been in differing schools, pledged as we are to our cause, we meet, extending, each to other, the "glad hand" of fellowship. "*Viae diversae*," it may be; "*destinatio una*"—our "ways" converge to one objective point, and the same: the restoration to social kinship of those in danger, thru force of untoward circumstances for which they are not responsible, of drifting apart from their kind; by so arming them against fate that, tho they may not yet "by opposing end" it, they may win from those about them honest praise for well-directed endeavor, and the intelligent and inspiring sympathy that spurs on to high emprise.

He who opened the eyes of the blind and unstopped deaf ears no longer walks among us—the "Man of Sorrows, and acquainted with grief," omnipotent in his sympathies, infinite in his patience. Yet upon us—in all reverence be it said—who so imperfectly, because, alas, humanly, tho humanely, are striving to lighten, if we may not lift, a burden of our common humanity grievous to be borne, doth not his mantle in a measure rest?

As those, then, struggling to carry forward his work, let us broaden our own sympathies; let us "covet earnestly the best gifts" for these deaf, not dumb, even tho voiceless children of our native land; ever ready to adapt our methods to their varying needs, while conscientiously utilizing to the utmost, and seeking to extend, the time that the public spirit of the community accords us.

THE IMPORTANCE OF A RIGHT BEGINNING

BY MISS HELEN TAYLOR, KINDERGARTNER IN PUBLIC DAY SCHOOLS FOR THE DEAF, LOS ANGELES, CAL.

There is, after all, a far-reaching truth in the old and timeworn expression of "as the twig is bent, the tree is inclined."

When we have in consideration the lives of so many hundreds of children deprived of hearing who are trying to cope with this great handicap,

the question of the proper way to start these children on the voyage of life is one of great importance. As teachers we feel this responsibility and are laboring to give them every advantage and help that the intelligence of the nineteenth century can afford.

By those unacquainted with the work of teaching the deaf child the great advance in the educational methods in this department can scarcely be realized. From a state of almost total isolation from society, he is rapidly taking his right place among his fellow-men. To walk into a sloyd room of hearing schools and to find there the deaf boys working along with their hearing brothers means a great deal to the ones who have been struggling all these years for such a condition and recognition for our defective children. Such is the case with the boys in the deaf department of the Spring Street School, Los Angeles. They enjoy the work and derive just the same benefit from it as do the other children. No difference is felt by the teacher who has charge of the sloyd department in the instruction of the deaf children, and no difficulty is experienced in communicating with them.

It used to be, and still is by many people, a fixed idea that because a child is deaf he is mentally deficient, and is considered peculiar, with all the unpleasant significance possibly attached to the word. And in many cases this opinion is justified by deaf children who are growing up without being helped to interpret the life around them and acquire the use of language. The time is now at hand when the deaf child must be justly dealt with; his education must fit him to mingle with, and be a living part of, the world.

This education cannot begin too early. It is seldom the case that the parents can give the proper amount of help, as it requires a great deal of time, patience, and knowledge of teaching to reach such a child. The mother cannot neglect her other duties entirely, and so it often happens that the child begins life with no idea of his proper relations, no sense of law, no conception of personal rights or ownership; in fact, he is in his own mind the nucleus of the little world in which he lives. Selfish, obstinate, unlawful, and many more unpleasant adjectives describe him, simply because he has not been able to adjust himself to life as he grew.

Realizing the urgent need for a close relation and hearty co-operation between parents and the children, there have been formed in many of our cities what is called "mothers' study clubs." The benefit derived from such clubs is incalculable. The mothers really take an active interest in the school life. They hold regular and frequent meetings for the purpose of studying how they can best help in the training and education of their children at home. The teacher does not feel, when the child goes home from school, that her work is discontinued until the next day, but that it will be helpfully carried on.

To do this, of course, there must be a close relation between the

mother and teacher; the schoolroom should be frequently visited and not be a place totally unlike home. As much of home life and interest should be introduced into each day's work as is possible. It is surprising to see how readily very small children comprehend their relation; how soon you can develop the sense of citizenship in them.

From first to last the great struggle in the education of the deaf child is to give him language and have him use it. The little hearing baby has words poured into his ears continually. He first learns to recognize the meaning of words, and then, as he begins to speak, it is long before one really plain word is spoken. Now, we certainly do not expect the deaf child after a few months of work to be able to do what the hearing child does after three years of hearing words continually. What we want is to have the child begin as soon as possible to recognize language and to use his vocal organs in natural baby babblings. In cases of children who are born deaf, no difference is detected in them until the time comes for them to speak. They laugh, cry, babble, just as does every normal baby. The kindergarten is one of the greatest blessings to the deaf child. In addition to developing his mental, moral, and physical nature, it gives him a wonderful opportunity to acquire language. I shall not go into detail about the special things and their uses for meeting the needs of children. It is conceded by the thinking world today that the kindergarten is an essential factor in education, and, as I have said before, the deaf child is quite as capable of comprehending and using material as any other. He is entitled to his share of the inheritance, and we have no right to withhold it. In our work we strive to have him see and feel the relations in life. Each day is followed in a logical sequence of work. To do this we have plans of work. When a subject is taken up it is developed in the natural way to the climax. The child is led to see each step. In the process of germination, for instance, the box is prepared for the seeds; soil is put into it; seeds are planted; each day we help in this growth by keeping the box in the sun and keeping the earth moist. By and by the first little green leaf appears, and the child's delight is unbounded; he feels natural interest in that plant life; the care of it each day is a pleasure; it makes him feel his importance, and that he is a necessity to something; he gets an insight into nature. In the games he is thoroly at home. His interest is aroused, and he is anxious and willing to have the language for these interests. The activities: jump, skip, walk, hop, run, catch, come, stand up, sit down, etc., he learns in a most unconscious way. At first the language is recognized from the lips, and when he is anxious for a "run" around the circle to "catch" another child, he soon begins to speak these words. After the child understands that speaking is the method of communication, he soon learns to try to use it. The acquiring of language by the little child is slow and often laborious. But as I recall an instance of a mother for the first time hearing her little one

say "love mamma," the amount of work sank into insignificance in comparison to the happiness of that mother who has been waiting so long to hear the voice which she had thought silent forever speak her name. Men and women have spent their lives working for children. Froebel and Pestalozzi have been quite as great benefactors of the deaf children as of the hearing. It is a matter long ago settled without question that the first years are the ones that need the most careful attention. No one would think of planting a choice flower and to allow it simply to grow without any care at all. Instead it is placed in a sunny bed, is carefully watered, is watched and worked with each day. So, in our child garden, we must be painstaking and indefatigable gardeners.

ALL ALONG THE LINE

BY MRS. KATHERINE T. BINGHAM, PALO ALTO, CAL.

The keynote of educational thought today is child study. No more may teachers blindly follow the traditions of the past. The drift of educational effort and the trend of educational progress are in the direction of keen insight into and careful consideration of the child's mind and ways; and upon these are based the new methods.

It is the glory of this kind of study that it includes of necessity all classes of children — the feeble-minded no less than the highly gifted; the blind child whose objective impressions are limited by the reach of his arm, and the deaf one whose world is bounded by his range of vision.

The knowledge of each class throws light upon other classes. Horace Mann first declared the true status of the deaf. Before his day the public regard classed them as peculiar objects of charity, to be relegated to the "asylums," and "for whose instruction," in Mrs. Bell's words, "strange and mysterious methods must be employed." Horace Mann first recognized the deaf child as an individual, as capable of the same kind and degree of education as any child, and he first set forth the idea of the co-ordination of his education with that of the hearing.

How would his noble heart have rejoiced to see the fruit of his planting as shown in this department of the National Educational Association! To him also is due the awakening of interest in oral teaching which speedily resulted in its introduction into this country from Germany, where it had been established for nearly half a century. The fatal mistake was made, however, from the start of trying to unite the two radically opposed systems of speech and sign language; and, tho resulting invariably in failure to the former, the combination is still maintained in many of our institutions.

A few fallacies and misconceptions prevail concerning the deaf that I long to see corrected. First is that *bête noir* of signs, about which more words have been wasted than about any other educational topic, I am sure.

The most oft-repeated and specious claim of their advocates is that signs are the natural language of the deaf, and are therefore superior to all other means of communication for them, entirely overlooking the fact that they are no less natural to the hearing, but are not for that reason allowed to supersede speech.

Every baby, the deaf and the hearing alike, learns to "pat-a-cake" and to imitate the entrancing pantomime of the "ten little piggies," told off on the rosy toe-tips, long before he can speak a word.

To deaf children signs are just as natural as to hearing children, but no more so. The deaf child also laughs and cries audibly, and expresses its baby emotions in the same inarticulate cooing and babbling as does the hearing baby, until he reaches the age when the latter begins to imitate the speech of those about him, while the former continues to make inarticulate and meaningless sounds because of not hearing those about him. This causes him to appear less intelligent than he should, and his mother begins to suppress these vocal utterances and to substitute signs for speech; thus the fatal habit of silence is formed and the pernicious practice of pantomime confirmed.

The continued use of signs, after the natural period for them has passed, instead of being natural, is the result of assiduous cultivation, and does, moreover, a distinct injury to the child, by retarding his mental growth and his acquirement of speech.

Another fallacy, repeated often by those who ought to know better, is that speech is not natural to the deaf child, but at best only a mechanical and artificial acquirement. The truth is that deaf children are no more naturally speechless than are hearing children. Both are alike born incapable of speech until it is taught to them. The hearing child acquires it (after some two years or so of natural mental preparation) unconsciously, by imitating the sounds he hears others use to express their thoughts.

Deaf children do not, indeed, gain what has been aptly termed "the unspeakable gift of speech" by nature's own process of unconscious acquirement, but yet they are undeniably aided by "the cumulative inheritance of a thousand generations of ancestors" who have communicated their thoughts by this means. They have an undoubted constitutional tendency toward speech. A special organ and set of muscles are set apart for them to utilize in this manner. The deaf child differs not at all from the hearing child, save only that his instinct and native aptitude cannot serve him without intelligent help at the right stage.

One out of every fifteen hundred of the children of the United States is born deaf, it is said; but it is only the ignorance or neglect of their friends that renders them dumb.

There exist in deaf, as in hearing, children the nerves and muscles connected with the organs of speech, and the use of these means of cerebral stimulation in deaf children results in a higher mental development than could otherwise be attained.

Sir Richard Burton, the famous traveler, tells of finding somewhere in the ends of the earth, where no gleam of civilization had penetrated, a people of the lowest type, who could not communicate with each other in the dark, but lighted blazing fires in their huts at night, before which they exchanged such limited ideas as they possessed, using the identical "natural" signs, no doubt, that are so eloquently extolled and so sedulously cultivated in the great institutions of our land at the present day. "Natural" they are, no doubt, to the infants of the race as to those of the civilized family, but they belong alone to the period of infancy. As wisely might you keep the sturdy youth in swaddling clothes as confine him — deaf or otherwise — to the sign language. There is a natural age for signs, and it is the same in the man as in the race — the age of infancy — to which signs correspond as an expression of mental power.

To this period of signs there succeeds, in the order of nature, that of articulate language as a means of conveying thought. This power develops later in all children, because it marks a higher stage of mental development. All other things being equal, the child educated by speech attains a fuller and more harmonious development than the one educated without it — by whatever other means.

We shall all agree about this when we are informed in the scientific facts of the matter and have no professional prejudice, or family fame, or selfish interest to warp our judgment. These are potential "ifs," I am well aware, but yet they are all fading swiftly away in the searching light of this day of the new education.

Examination of the records of the schools for the deaf of the United States shows that the importance of early instruction has only lately come to be recognized. At first the theory was held that "the pupil" (in the words of an early report of the first institution) "should be old enough to profit by the advantages offered him at public expense." Of late years it is found that the younger the pupil, the better the results. The Hartford Asylum, established in 1817 (by natural evolution this name has lately become the American School for the Deaf), fixed upon four years, and afterward twelve, "as the best time," as it was expressed, "for the commencement of their education." In 1843 the age was again reduced to eight years.

The movement for earlier admission has extended thruout the country, with few exceptions, several schools now admitting pupils at two and a half and even two years of age. Many of the older schools and institutions have several times reduced the age of admission.

In the matter of the time allowed for instruction, too, great advance has been made. The seventh annual report of the Hartford School — at

that time the only one in the country—speaks as follows: "Some pupils stay at the school only two years, and four is thought by many a pretty comfortable time for completing their education." A course of four years was then prescribed, "that being," to quote from the resolution adopted, "the least time in which they can acquire even an ordinary education." In 1835 the term was again extended to five years. As time has elapsed, the necessities of the case came to be better appreciated, and the period of instruction has been gradually increased, until now forty-four out of the seventy-eight schools of the United States allow a term of ten years and upward.

The first "day school" for the deaf was established about thirty years ago—the Horace Mann School of Boston, which is today one of the best equipped schools in the United States. There are now thirty-four of these schools in the country, which employ seventy-four teachers and accommodate 555 pupils. Twenty-three out of the thirty-four are oral schools, and they are located in nine different states.

In Chicago a unique and most excellent plan is in operation, which places the schools for the young children as near as possible to their homes. A class is opened in the nearest vacant schoolroom, where six to eight deaf children are gathered, while the older and more advanced pupils are expected to attend schools located at central points at greater distances from their homes.

The highest mark of advance attained in the education of the deaf up to the present time is the establishment of oral day schools for the deaf, as an integral part of the public-school system. This idea, and its first realization in Wisconsin some thirteen years ago, is one of the many great achievements for the deaf of Dr. Alexander Graham Bell, to whose world-wide fame as a scientist is added the yet greater honor of being the veritable apostle of speech for the deaf.

In the oral day school the deaf child may be educated at home, and his parents spared the anguish of separation during his childhood; they may co-operate in his education, and his instruction may be begun at a much earlier period than otherwise—an all-important consideration this, as the first years are the natural period for acquiring speech, and the lack of such opportunity has been the greatest obstacle to success heretofore. His education may be accomplished at far less expense, also, than is now the case where the state provides costly buildings and charges itself with the maintenance of its deaf as well as their education. A room is set apart in the ordinary public-school building, where a teacher specially trained for the purpose instructs a small class of deaf children in the same branches that are taught in the other rooms of the building. This is done by means of speech mainly, and in all cases by the English language. They join with their hearing companions of the other rooms in not a few of their exercises in which the eye may serve instead of the

ear; they mingle freely on the playground, gaining thereby abundant practice in speech and speech-reading, and in all ways come to affiliate with, and to assume their natural place among, the hearing.

On the other hand, the special training in phonetics and articulation given by their particular teacher is open also to the hearing pupils, and the numerous speech defects of foreign children, and of those having any impediment of speech, may be corrected. Moreover, those children, of whom late researches have disclosed so large a proportion in our public schools, whose hearing is so defective as to interfere sadly with their progress, serving to class them, oftentimes quite wrongly, as dull scholars, may be trained to make sight supplement hearing; or they may, in many cases, gain auricular development—ability in which art is an important part of the oral teacher's equipment, since there are numerous kinds and degrees of deafness among his pupils.

This plan is no longer an experiment, having been in successful operation in several eastern states for years, and it has even made its way of late to this coast. My hearers may see an illustration of this plan in the Spring Street School of this city, and the Los Angeles school board is to be commended for the progressive spirit shown in adopting this school, in advance of legislative enactment. The natural adjunct of the parents' association is also in operation here.

In San Francisco there is also an excellent private day school, whose teachers, in connection with the Parents' Association of Northern California, are active in every interest pertaining to the education and welfare of deaf children.

The oral method is fast supplanting the sign method, so that out of over five hundred schools in the world more than half are now oral schools. Dr. Bell's declaration at the Convention of American Instructors of the Deaf, at Flint, Mich., in 1895, was a prophecy that is being swiftly fulfilled. "Oralism," said he, "has come to stay; it will be the system of the twentieth century." I venture to predict, further, that before the end of the new century special teaching for the deaf child will have become a matter only of the very first few years of his life.

The education of the deaf child should begin in earliest infancy, precisely as does that of the hearing child. To this end the co-operation of the mother is indispensable. She must be assisted to do consciously for her deaf baby what she does unconsciously for her hearing one. Thus prepared to enter the kindergarten at the proper age, he will profit doubly by his training, and with such early preparation the battle of speech for the deaf child will be won before he even becomes aware of it; and as this plan of intelligent co-operation of parents and teachers comes to be more fully and perfectly realized, it is altogether probable that the whole problem of his education will be solved by the time he finishes his kindergarten course, so that he will no longer require special instruction.

Skilled thus in the use of his own mother-tongue, how infinitely happier the child is than if he were educated in the foreign language of signs, even tho his teacher were one of those "masters" "whose hands," in the eloquent words of one of the sign-language enthusiasts, "pluck the stars from their courses, who bring the rolling sea to his feet, and in whose fingers the budding flowers burst into bloom"!

It is of pre-eminent importance to teach speech to deaf children at the natural age when hearing children acquire it. When the war about conventional methods shall cease, and teachers of the deaf shall come and sit with teachers of the hearing at nature's feet, then will it appear that heaven and earth work together to teach the deaf child to talk.

By means of constant early use of his voice it will respond to his emotions, and will not become harsh. A deaf child whose attention is early directed to harshness of tone whenever he produces it soon becomes quite as sensitive as if he could hear. This is because such vocal utterance is the expression of a jarring sensation within, which the deaf child easily learns to recognize, and in the beginning can easily control.

The scientific study of the deaf child not only throws a flood of light upon the subject of means and methods of instructing him, but we are much encouraged to find how generously nature compensates his defect. Scientists tell us that nine-tenths of every child's sense-perception comes thru sight. We who know deaf children are assured that the superior skill in observation which they acquire of necessity goes far to make up for the lack of the remaining tenth. Moreover, the sense of touch—resembling, as it does, that of hearing, in giving first the parts, and then the whole, leading to synthetic mental processes—is a suitable counterpart to the sight, by which we see first the whole, and then its parts, leading to analytic thinking.

It is greatly to be desired that the sense of touch should receive more particular attention and cultivation in schools for the deaf.

Some most interesting and valuable experiments in this direction were made years ago in the practice school of Dr. Bell in Washington. A most ingenious touch alphabet, devised by him, and designed as a complement to the visible elements of speech and to be used in connection with speech, was found very useful in assisting the acquirement of speech-reading. It is much to be regretted that many progressive and original ideas proved there to be both practical and helpful should not have found their way to other schools.

Besides the neglect to cultivate the sense of touch as an ally to sight, and as taking the place of hearing in its mental effect, another most valuable aid is overlooked in physical culture—intelligently arranged breathing exercises, and judicious gymnastic practice for increasing lung power and vocal volume. This is far more important for the deaf child

than for the hearing, not only as a means of muscle-building, but still more so for its value in developing voice.

At present, while we work and wait for the ideal conditions of the future, we have to make the best of many discouraging ones in the present. Children of all ages and stages, and all phases of ignorance and neglect, must be instructed; but for them all my urgent plea is that they may be given speech.

There can be no question to any well-informed and fair-minded person that speech is practicable and in every way desirable, for the deaf as for the hearing. This is not saying that every deaf child of every age may learn to talk as well as any hearing one; but I do claim that speech, even tho imperfect, is far better than any other means of communication for every child born among hearing people. Among the thousand and one good reasons why the deaf should be educated by speech there is one pre-eminent in importance, namely, that thereby only may they assume and maintain their proper and rightful place in society. Can you think what it is to go thru life as one of a peculiar class? It is the sum of human misery. No other misfortune is comparable to this. The individual must be one with the race, or he is virtually annihilated. I can assure you of my own knowledge that the fact of congenital deafness imposes no heavier burden—no other burden, indeed, of necessity—than just this sense of peculiarity, apartness from the life of the world, to which the deaf equally with the hearing belong. And, believe me, this peculiarity is not inevitable. It is solely the result of shutting up deaf children to be educated in sign schools, whence they emerge to be lifelong foreigners in their own families and aliens in their own country.

The day of progress has come. Teachers of the deaf, allied with those of the hearing, are measuring themselves and their methods by a broader and more intelligent standard. Above all they are coming to regard the deaf child as one with his kind, to whom science and humanitarian progress have at length restored his birthright of education and the enjoyment of his life in the world of hearing people.

IN WHAT RESPECTS SHOULD THE EDUCATION AND TRAINING OF THE BLIND DIFFER FROM THE EDUCATION AND TRAINING OF NORMAL PUPILS?

BY WARRING WILKINSON, SUPERINTENDENT OF THE INSTITUTION FOR THE DEAF AND BLIND, BERKELEY, CAL.

It is not my purpose in the present paper to ignore the handicap of blindness in an efficient equipment for life and its duties; nor is it my purpose to detract from the merit of the patient, hard-working teacher

under whose wise guidance and helpfulness this handicap is reduced to a minimum. In all the range of pedagogy which in these latter days is becoming so differentiated and specialized, I know of no department where aptitude and experience count for so much, and are so essential to the highest success, as in teaching the blind and the deaf. And yet I sometimes think that we are apt unduly to magnify our work and its difficulties, and to permit the public to surround it with a mystery that does not by right attach to it. To the average man the calamity of blindness is so appalling, by shutting his eyes it is so easy to realize its hideous blackness, that he is prepared to look upon any achievement under such harsh and untoward conditions as a little short of miraculous. And then the pity of it! To think of this imprisoned soul, whose horizon is bounded by the radius of his arm, walking in eternal darkness, stirs human sympathy to its lowest depths. Thus wonder and tenderness unite to exaggerate the work of our pupils, and our part in it. The effect is not good on the teacher or the taught. By reason of our partial isolation we both live in an atmosphere of commendation which is exceedingly pleasant to breathe, but is not wholesome to the intellectual life. Scarcely a visitor enters our class-room without ejaculating, "Wonderful," "Marvelous," or "Poor things," "Isn't it sad?" as his emotion predominates—both expressions equally bad in their moral effect, one stimulating conceit in the pupil, the other enervating his manly fiber, which is weak enough at the best.

It has been my fortune for the last thirty-four years to be associated with the blind and the deaf, brought under the same management during their school life. The opportunity has thus been given me to observe the comparative disability caused by the loss of sight or hearing, and the relative value of the eye and the ear as factors in intellectual development. It has been an interesting study. The psychological conditions produced by deafness and blindness have no sort of similarity, and perhaps you will bear with me for a few minutes while I roughly sketch the salient features of these differences. It will be nothing new to my professional friends, but may have some interest to those who have never had their attention called to the subject.

All experience comes to us thru the senses, and it is only as experience thus derived is organized and correlated that human intelligence is developed. Indeed, I cannot imagine a *soul* to flower and fruit without the vivifying influence of sensuous experiences. I can believe in a potential energy, hidden somewhere in the convolutions of the brain, whose latent life may be awakened to activity by the ceaseless impact of sense-perceptions, just as I can believe in the potential blade and stalk and ear which a kernel of corn contains and puts forth under the gentle stimulus of sunshine and shower, but the growth of the seed is conditioned by moisture and warmth, and the initial development

of the soul or self-consciousness must depend upon something to be conscious of.

But, while intellectual development depends upon experience, and experience comes thru, or by means of, the senses, it does not follow that all the senses are of equal value. Many people get on very well in this world without the sense of smell; perhaps are sometimes happier for lack of it. It is said that Democritus put out his eyes in order that he might *see* better, which is probably a classic myth to illustrate the value of introspection; but an aborted or paralyzed auditory nerve interferes with the natural processes of thinking, deprives the deaf-mute of his share in the accumulated wisdom of the ages, cuts him off from all communication with his kind, and offers the saddest sight on earth, a primitive human being standing bewildered amid the intellectual life and activity of the nineteenth century. No lullaby of maternal love falls upon his deadened ear; no nursery rhyme or fairy tale comes to stir his imagination; no chatter of childhood; no evening prayer at the mother's knee; no songs of praise; no answers to the questioning of his pathetic eye.

The deaf child has, to be sure, the visual perception of color, form, and space, but he has no words or names for these phenomena, and, for lack of intellectual commerce, they exist as incoherent, uncorrelated facts of an experience which is of no great value as a mental stimulus.

Blindness produces an entirely different set of psychological conditions. The lack of sight is an interference with freedom of physical movement, and the deprivation of one important group of sensuous experience, but causes no serious mental disturbance. The blind child, unlike the deaf-mute, has none of the struggle with language as the instrument of thought to contend with. From earliest infancy his mental processes have been developed along normal lines, so far as the vehicle of knowledge is concerned. His speech comes to him without effort or fatigue thru the ceaseless prattle of parents and playmates. "Mother Goose" and Grimm's tales form the foundation of his literary equipment, just the same as of his seeing brother. He takes in thru his abnormally quickened sense of hearing all the knowledge and wisdom floating in popular speech, the multitudinous voices of nature, the song of linnet and lark, the katydid's querulous cry, the buzz of insect life, the sough and sigh of the forest, and its analogue, the ceaseless surf of the "many-sounding sea." With it all comes the varied nomenclature of this vast body of experience, and, if the child has an environment of refined speech, he formulates his vocabulary in correct syntactical sequence without the toilsome study of Brown or Kerl. As his intelligence develops, he needs no eyes to appreciate the literature of poetry, of history, of science, or of art. He listened with rapt delight to the legendary bringing of the Trojan gods to Latium as told by Virgil, and to the scarcely less thrilling

prose epic of the Plymouth Colony as told by Fiske. The sad story of Little Nell and the sisterly self-sacrifice of Effie Deans brings tears to his sightless eyes. He laughs at the jokes of Charles Lamb and Thomas Hood; appreciates alike the Yankee patois of the *Bigelow Papers* and the unctuous brogue of *Mr. Dooley of Chicago*, and at the same time keeps abreast with the march of science and invention, and talks as intelligently as most of us concerning the automobile and wireless telegraphy. Nay, more: he may hope himself to contribute something to the stock of human achievement, for which he has the stimulus of fine example; for the services of the blind to the world have been many and eminent. The greatest poems have been written by blind men, Homer and Milton; among the foremost histories stand the works of William Hickling Prescott, a blind man; a standard authority on bees was written by François Huber, a blind man; the Lucasian chair of mathematics at Cambridge University was filled for many years by Nicholas Saunderson, a blind man; the best postmaster-general England ever had was Henry Fawcett, a blind man; while Herreshoff, the blind shipbuilder, has designed the fastest yachts in Europe and America.

I have meant you to infer from what I have said that the blind child is a child lacking an important sense, it is true, but the lack of which does not interfere with normal processes of thought or its expression. A certain group of sense-perceptions with the blind, as with the deaf, must be forever unknown. In both cases other senses are called upon to substitute in an imperfect way the lost faculty. The eye cannot hear; the ear and fingers cannot see; and, while the congenitally blind talk glibly, as they often do, of the phenomena of light and color and space, it must be quite evident to you that correct concepts of these phenomena are impossible to them. So when a blind poet like Dr. Blacklock writes,

Mild gleams the purple evening o'er the plain,

we are sure he is using merely conventional terms of speech, of the fundamental meaning of which he can know nothing. And when Saunderson, the blind mathematician, said that the color *red* was to him like the blast of a trumpet, he illustrated the sort of sense metonomy which continually takes place in the mind of a blind person. But while the cognitions of the senses are thus interchangeable only by a verbal convention, there is a quickening and strengthening of the remaining faculties by use and burden, a collection of experiences and observations, which, being unconsciously perhaps co-ordinated, rises in the blind to the dignity of almost a sixth sense, and explains the marvelous recognition of person, place, and direction which often puzzles his seeing companion. Now, it is because the blind child is thus normal in way of thinking that I say he should be educated on those lines which the best wisdom and experience approve for seeing children.

As this paper is not written to set forth what *is* the best system for educating a seeing child, I might well stop here, leaving to you to search out that best method and to apply it in your individual work.

But I also referred to certain reservations which are called for, not so much by the nature of blindness itself as by the thoughtlessness or mistaken tenderness of parents and friends, and the attitude of the child's civic environment. What I have to offer is designed to bring the blind child into line with his seeing fellows, and not to suggest differences in the methods in instruction.

The heaviest handicap of the blind is not his lost sight, nor his lack of one group of sense-cognitions. This is bad enough, to be sure, but his misfortune is greatly exaggerated in many cases by the ill-advised "helps" that are continually thrust upon him from the moment his blindness is discovered till at last he loses all ability to take care of himself, and, what is worse, all desire to do so.

From earliest infancy many a blind child is hedged in by a succession of restrictions that are worse than the foot bandages of a Chinese lady of rank. He must not put on his own clothes because, when he once tried it, he got on his trousers wrong side before. He cannot wash himself because he makes "a mess of it." He is not allowed to move for fear he may run his nose against the door or bark his shins on the horse block. He might fall if he climbed a cherry tree in search of fruit, and to go on an errand to the next-door neighbor would be as dangerous as Nansen's expedition in search of the North Pole. Bobby must give up to Tommy his sweetmeats, his playthings, his priceless collection of pocket paraphernalia, with no adequate return, because "Tommy is blind, you know;" and so Tommy becomes selfish as well as helpless. If parents could be made to understand the value of the cultivation in their blind child of manners, care and cleanliness of person, self-help and independence of movement, the little altruisms of the fireside and playground, and the vigilant suppression of habits which attract attention, the work of the school would be greatly simplified and relieved. For this training the parent is responsible, and it ought not to be delayed for, nor delegated to, the institution.

The gymnasium with a competent teacher should be a part of every well-equipped school for the blind as for the seeing; and for girls it is indispensable; but for boys I know of nothing that quite equals a military drill. It cultivates erectness of carriage, synchronous movement, measured step, varied exercise, and a certain alertness of mind, in co-ordinating muscular action. These are all valuable acquisitions toward the physical training of the blind; moreover, the soldierly drill eliminates one more of the things which "the blind cannot do," and, to this extent, strengthens his moral power.

It is from this lack of moral power, or "grit," or "sand," to use the

strong Saxon metaphor of the street, that our saddest failures come. The lack is largely due to the injudicious coddling just spoken of, and the physical and the mental flabbiness consequent thereto, and is increased by the universal sympathy which the misfortune of blindness engenders, and which finds easiest expression by a gift of coin or the paying twenty-five cents for a lead pencil dear at twenty-five cents a gross. I confess that the temptation of the blind is sore. To trade on his affliction, to stand with placard on breast and cup in hand on a street corner and gather in the benevolent contributions of the passers-by, is so much easier than to "rustle" and to work; and when one sees the horde of stalwart, able-bodied tramps which infests alike city and country, it is small wonder that now and then a blind man yields to temptation and avails himself of the profitable and easy resource at his command. It is, however, our business to see that, so far as in us lies, every pupil goes forth equipped, not only with a book knowledge that shall place him in intellectual fellowship with his seeing brother, but also with a manly determination to do his part in the battle of life, and if need be to die in the conflict. It is not always necessary to live; to die is sometimes gain. The struggle of Gethsemane, the agony of Calvary, have helped men to suffer and to endure for nineteen hundred years.

Our boys should be taught, not the dignity of labor, but the dignity of the laborer; that the bread of charity is unwholesome; that a coin received in alms should burn in the palm like fire; that starving is better than begging; and, if down he must go in the fierce mêlée of life, let him go with unsullied soul and exulting manhood.

Somehow I cannot help thinking that this sort of education, this character-building, is more important than enlarging the blind boy's sense-perception of things that are of no particular consequence anyhow. Indeed, I sometimes think that we are unduly anxious about petty details of tactual perception at the sacrifice of matters of larger moment.

There are relative values in subjects for teaching, and the best instructor will best select from the vast storehouse at his command; not that all sorts of knowledge have not some value, but that some sorts are of more worth than other sorts.

In all departments of public education, and in life as well, this "terrible choice," as Robert Browning calls it, is of the highest importance; but in the education of the blind it is vital, for misdirected effort during their school life is not so easily corrected and atoned for as with those who can see. I sometimes fear that in these days of money-getting, when education seems so largely directed toward how to "make a living," we are neglecting the gentler art of "how to live;" that in the demand for mechanics we forget the nobler use and need for men. I once heard Charles Dudley Warner say in a college address that the ideal university of the future would be a place where nothing practical is taught. The

remark was doubtless a humorous protest against the material tendencies of the age, but there was a pregnant thought at the bottom of it, viz.: that character and culture are better than coin; that "a life" is better than "a living."

The material achievements of men are but the temporary housings that perish with the using. If in some great cataclysm of nature all the houses and railways and ships and temples and monuments and wealth were destroyed, and the world could be left with its accumulated experience of faith and hope and charity and patience and love that have been gathering force thru all the ages, the world would be the better for the change; for out of the wreck of matter would speedily rise a new earth, spanned by a nobler heaven than vision of prophet ever saw. No need of crystal sea, nor jeweled gates, nor golden streets, to adorn this new Jerusalem; the all-sufficient glory and beauty thereof would be its true and faithful men and women.

LIST OF LIFE AND ACTIVE MEMBERS

ARRANGED BY STATES, CLASSES, AND YEARS OF CONTINUOUS MEMBERSHIP

REVISED TO DECEMBER 1, 1899

The marginal figures indicate the year of the commencement of continuous annual membership for those whose names immediately follow. The indented figures indicate year of appointment to present educational position. The names of deceased members are indicated by a *.

Extra copies of this list may be obtained by remitting twenty-five cents to the Secretary, Irwin Shepard, Winona, Minn.

ALABAMA

ACTIVE MEMBERS

1882. JULIA S. TUTWILER.
Principal of Alabama Normal College for Girls, Livingston.
1888. J. H. PHILLIPS, A.M., Marietta Coll., O.; Ph.D., Southern Univ., Ala.
1883. Superintendent of Schools, 2231, 7th Ave., Birmingham.
1892. FRANCIS MORTON ROOF.
1897. President of Howard College, East Lake.
1894. LUCIEN V. LA TASTE.
General Agent, University Publishing Co. of New York, Box 564, Montgomery.
JOHN MASSEY, A.M., '75, LL.D., '79, Univ. of Ala.
1876. President of Alabama Conference Female College, Tuskegee.
1895. MARY A. CAHALAN.
1884. Principal of the Powell School, 2311, 4th Ave., Birmingham.
J. B. CUNNINGHAM.
1898. Principal of High School, 600 S. 27th St., Birmingham.
ROBERT ALEXANDER MICKLE, A.B., '86, Davidson Coll., N. C.
Principal, Jefferson St. Primary and Grammar Schools, 101 Georgia Ave., Mobile.
KATE E. MOON.
Grammar Department, Public Schools, 110 N. Conception St., Mobile.
JAMES K. POWERS, A.M., '73, LL.D., '97, Univ. of Ala.
1897. President of University of Alabama, University.
JOHN D. YERBY, A.B., '79, Southern Univ.; A.M., '96, Univ. of Ala.
1894. Superintendent of Schools, 996 Government St., Mobile.
1897. ALABAMA POLYTECHNIC INSTITUTE.
President, William Le Roy Broun; Librarian, Charles C. Thach, Auburn.
1898. ROBERT VENABLE ALLGOOD, B.P., '88, B.Sc., '90, So. Univ., Greensboro; A.M., '93, Univ. of Nashville.
1894. Superintendent of Public Schools, 5th Ave. E., Avondale, Birmingham.
J. F. ELLIOTT.
1897. Principal of High School, Brookwood.
J. A. KNIGHT, B.C., '87, Keochie Coll., La.; B.Sc., '95, Nat. Nor. Univ., Lebanon, O.; A.B.
Superintendent of Schools, Mt. Willing.
1899. ARTHUR U. CRAIG, B.Sc., '95, Univ. of Kan.
1895. Teacher of Physics and Mechanical Drawing, Tuskegee Institute, Tuskegee.

ARIZONA

ACTIVE MEMBERS

1895. HORACE E. WILSON.
1898. Superintendent in charge of Supai Indians and School, Supai.
LYDIA HUNT WRIGHT.
1894. Superintendent, U. S. Indian Boarding School, Indian School, San Carlos.
1898. T. E. DALTON.
Ex-Territorial Superintendent, Phœnix.
R. L. LONG.
1899. Superintendent of Public Instruction, 211 Fleming Block, Phœnix.
1899. FRANK YALE ADAMS, A.B., '88, A.M., '94, St. Lawrence Univ.
1897. Professor of History and Pedagogy, University of Arizona, Tucson.
W. J. ANDERSON, B.Sc., '97, National Univ., Chicago.
1898. Grand Avenue School, 12th Ave.; Box 282, Phœnix.
EDWARD J. BERRINGER.
Teacher in Indian Schools, Parker.
SIDNEY C. BOTKIN.
Matron of Indian Schools, Parker.
F. A. COOLEY, A.B., '92, Stanford Univ.
1898. Superintendent of Schools, 51 Council St., Tucson.

ARIZONA—*Continued*

1899. W. B. CREAGER, A.B., '95, Ind. State Univ.
Superintendent of City Schools, Phœnix.
GERALDINE E. GERALD.
1898. Teacher in Fifth and Sixth Grades, Globe.
A. J. MATTHEWS.
1898. Superintendent of City Schools, Prescott.
J. R. MESKIMONS.
1896. Assistant Principal of High School, Phœnix.
M. M. PARKER, A.M., '78, Wesleyan Univ.
1897. President of University of Arizona, Tucson.

ARKANSAS

ACTIVE MEMBERS

1887. THOMAS A. FUTRALL, A.M., West Tenn. Coll.
1884. Superintendent of Schools and County Examiner, Marianna.
1890. JOSIAH H. SHINN, A.B., A.M., '70, Northwestern Univ.
Editor "Southern School Journal," President, College of Springdale, Springdale.
1895. GEORGE B. COOK, A.M.
Superintendent of City Schools, Hot Springs.
J. L. HOLLOWAY, A.M., Missouri State Normal.
1889. Superintendent of Schools, 12th and K Sts., Fort Smith.
W. W. RIVERS, A.B., '86, A.M., '89, Univ. of Miss.
1894. Superintendent of City Schools, Helena.
1896. HOWARD GATES.
1891. Principal of Kramer School, Little Rock.
J. H. HINEMON, A.M., '93, Arkadelphia Coll.
1895. Superintendent of Schools, 618 W. 6th Ave., Pine Bluff.
ALFRED LEE PEACHER, A.M., '92, Wooster Univ., O.
1895. Superintendent of Schools, 806 Broadway, Van Buren.
1897. HENDRIX COLLEGE.
President, A. C. Millar, Conway.
J. W. PARKER.
Principal of School, 8th and B Sts., Fort Smith.
JOHN HUGH REYNOLDS, A.B., '93, Hendrix Coll.; A.M., '97, Univ. of Chicago.
Professor of Education and History, Hendrix College, Conway
1898. MRS. E. M. BLAKE, Ph.B.
Teacher of English, Onachita Baptist College, Arkadelphia.
BELLE BUNZEL.
Teacher in Public Schools, Little Rock.
A. D. CARDEN, A.B., '90.
1898. Superintendent of City Schools, Camden.
A. H. CARTER, A.B.
1890. Principal of Duval School, 401 S. 18th St., Fort Smith.
J. C. CORBIN, A.B., '53, A.M., '60, Ohio Univ.; Ph.D., '99.
1873. President of Branch Normal College, Pine Bluff.
EVA L. DAVIS, B.L., Hardin Coll., Mexico, Mo.
1898. Teacher in Public Schools, 1003 Poplar St., Pine Bluff.
R. C. HALL.
1898. Principal of Peabody High School, 1817 Broadway, Little Rock.
FRANCES OWEN HOGG.
Teacher in Public Schools, 630 Chestnut St., Pine Bluff.
EMMA MANN, M.E.L., '91, Memphis Con. Female Inst., Jackson, Tenn.
1898. Vice-Principal of 6th Ave. School, 627 Pine St., Pine Bluff.
JOHN E. MARTINEAU, A.B., '96, Univ. of Ark.
Principal of Public School, Argenta.
MARY E. MITCHELL.
Assistant in High School, 713 State Line St., Texarcana.
MAGGIE MURPHY, M.E.L.
1890. Teacher in Public Schools, Little Rock.
T. P. MURREY.
Representative of American Book Co., Fort Smith.
JESSIE POLLOCK, M.E.L.
1895. Teacher in Public Schools, Little Rock.
J. R. RIGHTSELL.
Superintendent of City Schools, Little Rock.
CORA SHEBER.
1894. Teacher in Public Schools, Hot Springs.
JULIA SHIVES.
Teacher in Public Schools, Van Buren.
1899. J. J. DOYNE.
State Superintendent of Public Instruction, Little Rock.
JAMES H. WITHERSPOON, A.B., '92, Univ. of Tenn.
1895. Principal of High School, 205 W. 12th Ave., Pine Bluff.

CALIFORNIA

LIFE MEMBERS

1877. ANNA KALFUS SPERO.
Publisher, N. McLaughlin Ave., near Santa Clara Ave., San José.
1879. JAMES H. HOOSE, A.M., '64, Ph.D., '73, Syracuse Univ.
Department of Psychology and Pedagogy, University of Southern Cal., 255 S Euclid Ave., Pasadena.

1882. HARRIET N. MORRIS, A.M., '86, Nat. Nor. Univ.
2346, 2d St., San Diego.
1884. NATHAN CROOK TWINING, A.B., '61, A.M., '65, Milton Coll., Wis.
1895. Principal of San Jacinto High School, 1224 Walnut St., Riverside.
1886. C. Y. ROOP.
1899. Superintendent of City Schools, Santa Barbara.
1888. REBECCA F. ENGLISH.
1891. Critic Teacher, State Normal School, 141 S. 10th St., San José.
1889. AUGUSTA W. HOBE.
1888. Teacher in Grammar Grade, 1633 Hyde St., San Francisco.

ACTIVE MEMBERS

1889. SANFORD A. HOOPER, A.B., '72, A.M., '82, Beloit Coll.
1899. Head Master of Los Angeles Military Academy, Los Angeles.
EDWARD T. PIERCE, LL.B., '77, Union Univ.; Pd.D., '94, N. Y. Nor. Coll.
1893. President of State Normal School, 631 W. 5th St., Los Angeles.
1891. ELMER ELLSWORTH BROWN, A.B., '89, Univ. of Mich.; Ph.D., '90, Halle.
1893. Professor of Theory and Practice of Education, Univ. of Cal., 2341 Channing Way, Berkeley.
1892. FREDERIC L. BURK, B.L., '83, Univ. of Cal.; A.M., '92, Sanford Univ.; Ph.D., '98, Clark Univ.
1899. President of State Normal School, San Francisco.
1893. JAMES A. FOSHAY, A.M., Univ. of So. Cal.; Pd.D., '98, N. Y. Nor. Coll.
1895. Superintendent of Schools, 2341 Scarff St., Los Angeles.
1894. ELLWOOD P. CUBBERLEY, A.B., '91, Ind. Univ.
1899. Associate Professor of Education, Leland Stanford Jr. Univ., Stanford Univ.
J. C. TEMPLETON, A.B., Leland Stanford Jr. Univ.
1899. Superintendent of City Schools, Santa Ana.
CHARLES C. VAN LIEW, Ph.D., '93, Jena.
1899. President of State Normal School, Chico.
1895. D. R. AUGSBURG, B.P., '84, Syracuse Univ.
1898. Director of Drawing, Public Schools, 1261, 6th Ave., East Oakland.
LEWIS B. AVERY, B.Sc., '83, Tabor Coll., Ia.
1895. Principal of Union High School, Redlands.
WALTER J. BAILEY.
Ex-County Superintendent of Schools, Escondido.
SAMUEL T. BLACK.
1898. President of State Normal School, San Diego.
THEODORE B. COMSTOCK, B.Ag., '68, Pa. State Coll.; B.Sc., '70, D.Sc., '86, Cornell Univ.
535 Stimson Block, Los Angeles.
MELVILLE DOZIER, Ph.B., '67, B.Pd., Furman Univ., S. C.
1895. Vice-President of State Normal School, 825 W. 11th St., Los Angeles.
CHARLES EDWARD HUTTON, A.B., '53, A.M., '61, St. John's Coll., Md.
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1892. Chancellor of University of Mississippi, University.
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1888. Associate Principal of Academy, Appleton City.
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1891. Principal of Public School, Clayton.
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1898. Teacher of Botany, High School, Missouri Botanical Gardens, St. Louis.
1897. Z. R. ASHBAUGH, Grad., '72, Hillsdale Coll., Mich.
1898. Agent for American Book Co., Midland Hotel, Kansas City.
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1898. Superintendent of Schools, Bloomfield.
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1882. Superintendent of Schools, Mexico.
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1896. Principal of High School, 819, 8th Ave., Helena.
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1890. Editor and Publisher "Northwestern Monthly," Lincoln.

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1893. Superintendent of Schools, Blair.
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1892. Superintendent of Schools, Norfolk.
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1892. Principal of Grammar School, 658 S. 17th St., Lincoln.
1895. Charles Edwin Bessey, B.Sc., '69, M.Sc., '72, Mich. Agri. Coll.; Ph.D., '79, Univ. of Iowa; LL.D., '98, Iowa Coll.
1884. Professor of Botany, and (1899) Acting Chancellor of the University of Nebraska, 1504 S St., Lincoln.
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1897. Inspector of Nebraska High Schools, 631 N. 24th St., Lincoln.
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312 N. 21st St., Omaha.
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1895. Professor of Pedagogy, University of Nebraska, 1542 P St., Lincoln.
A. A. Reed, A.B., Univ. of Neb.
1893. Superintendent of Schools, Crete.
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1892. Principal of Ward School, 2539 Capitol Ave., Omaha.
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1894. Superintendent of Schools, 510, 14th St., Columbus.
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1892. Professor of Am. Hist. and Jurisprudence, Univ. of Neb., 511 N. 16th St., Lincoln.
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1897. Superintendent of Nebraska Institute for the Deaf and Dumb, Omaha.
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1897. State Superintendent of Public Instruction, 1909 G St., Lincoln.

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1898. Superintendent of Public Schools, High School, South Omaha.
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1896. Superintendent of City Schools, Harvard.
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1896. Principal of Clifton Hill School, 314 S. 26th St., Omaha.
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County Superintendent of Schools, Plattsmouth.
ANNA FOOS.
Principal of Schools, The Madison, Omaha.
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Superintendent of Schools, Valley.
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1893. Professor of Zoölogy, University of Nebraska, Lincoln.
1898. JOHN WIRT DINSMORE.
Superintendent of City Schools, 425 N. 4th St., Beatrice.
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1898. Superintendent of City Schools, 115 N. 11th St., Nebraska City.
OMAHA PUBLIC LIBRARY.
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1893. Department of Biology, Nebraska Wesleyan University, Lincoln.

NEVADA

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1897. First Assistant of Latin and German, Boys' High School, and (1899) Acting Principal of High School Annex, 23d St., New York city; res., 21, 9th Ave., Newark.
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1896. CHARLES J. BAXTER.
1896. State Superintendent of Public Instruction, 930 Putnam Ave., Plainfield.
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1895. Principal of Leonia Heights Public Schools, Leonia, Bergen County.
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EDWIN C. MERRILL.
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1897. Superintendent of City Schools, 54 High St., Passaic.
*Miss M. J. B. Thomas, Pd.M., '93, N. Y. Univ.
1889. Principal of High School, 425 Ave. E, Bayonne City.
Albert H. Wilson.
1892. Principal of Nassau Public School, 111 Chestnut St., East Orange.
1897. Margaret Bancroft.
Principal and Owner of Haddonfield Training School, Haddonfield.
Miss Jean N. Cox.
1889. Principal of Haddonfield Training School, Haddonfield.
Anna M. Fell, M.E.L., Pennington Sem.
1894. Principal of Cadwalader School No. 21, 304 W. State St., Trenton.
Free Public Library of Jersey City.
Librarian, E. E. Burdick, Jersey City.
Mary A. Lyon.
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President of Rider Business College, Ribsam Bldg., Trenton.
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State Normal School, Trenton.
Principal, J. M. Green, Trenton.
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1897. Superintendent of Schools, 103 Maple Ave., Red Bank.
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Principal of the New Jersey Training School for Feeble-Minded Children, Vineland.
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Principal of West Jersey Academy, Bridgeton.
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1898. Superintendent of Schools, High School, Orange.
Claude L. West.
1897. Principal of Elementary School, 478 Ellison St., Paterson.
Leonard Worcester Williams, A.B., '95, A.M., '98. Hanover Coll., and '99, Princeton Univ.
1899. Fellow in Biology, Princeton University, 73 Alexander St., Princeton.
1899. R. L. Rogers Dresser.
Trainer of Kindergartners, 229 High St., Burlington.
J. Howard Hulsart, A.M., '98, Ill. Wes. Univ.
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Andrew F. West, Ph.D., LL.D.
1883. Professor of Latin, Princeton University, Princeton.

NEW MEXICO

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1896. Assistant Principal of High School, Ripon.

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1895. Principal of Lahainaluna Seminary, Lahaina.
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1899. President of Insular Board of Education and Insular Superintendent of Schools San Juan.

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Dewey, Jas. A., Pa., '93
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Dial, S. T., Ohio, '95
Dick, Fred. Colo., '95
Dickey, C. L., Ohio, '95
Dietrich, Chas. H., Ky., '91
Dietrich, John, Colo., '95
Dillman, L. M., Ill., '86
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Dix, Wm. T., Ill., '96
Dixon, B. V. B., La., '97
Doane, Letitia L., Ill., '97
Dobson, W. D., Mo., '97
Dodd, Arthur A., Mo., '85
Dodge, M. Luella, Ill., '97
Dodge, R. E., N. Y., '98
Dodge, Wm. C., Ill., '96
Dodson, Mary F., Ky., '92
Dolphin, M. E., Kan., '95
Donohoe, Mary J., N. J., '94
Dorland, J. E., Ky., '92
Doron, W. A., Iowa, '97
Doty, F. E., Wis., '97
Dougherty, Mabel E., Ill., '89
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Doughty, Jas. C., Nev., '99
Douglass, F. L., Iowa, '99
Dow, J. J., Minn, '96
Downes, J. M. N., Ky., '94
Downey, Miss B. P., Mont., '99
Downing, A. S., N. Y., '91
Doyle, Marie, E., Wis., '91
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Dozier, Melville, Cal., '95
Draper, Andrew S., Ill., '88
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Dudley, Mrs. E., Iowa, '97
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Dutton Bettie A., Ohio, '80
Dutton, S. T., Mass., '95
Dyer, F. B., Ohio, '96
Dyer, Frank R., Kan., '91
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Elder, Ella C., N. Y., '96
Elder, E. W., Colo., '95
Elgas, Mathew J., N. Y., '91
Eliot, Chas. W., Mass., '92
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English, Rebecca F., Cal., '88
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Estee, Jas. A., N. Y., '96
Evans, Chas. H., Mo., '86
Evans, Chas. W., W. Va., '96
Evans, Lawton B., Ga., '94
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Fairchild, Geo. T., Ky., '86
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Fisher, Gilman C., Mass., '92
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Franklin, Geo. A., Minn., '97
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Gideon, Geo. D., Pa., '99
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Gilday, Mary, Mo., '95
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Glover, Nathan L., Ohio, '89
Gminder, A. J., Md., '98
Golden, H. W., Pa., '98
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Gordy, W. F., Conn., '98
Gorton, Chas. E., N. Y., '96
Goss, David K., Ind., '95
Gotwalls, Jos. K., Pa., '92
Gove, Aaron, Colo., '88
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Gratz, Simon, Pa., '79
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Greeley, J. P., Cal., '99
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Greene, John A., N. Y., '93
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Greenlee, L. C., Colo., '92
Greenman, A. V., Ill., '97
Greenwood, J. M., Mo., '86
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Griffin, E. H., Md., '99
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Griffiths, G. C., Ill., '96
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Groszmann, M. P. E., Wis., '94
Grove, M. A., Pa., '97
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Guilliams, J. M., Tenn., '97
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Guttmann, Albert, Wis., '97
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Hadley, Hiram, N. Mex., '91
Hafford, F. S., Cal., '97
Hagerty, C. T., N. Mex., '95
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Haight, R. A., Ill., '95
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Hale, Geo. D., N. Y., '91
Hale, Wm. G., Ill., '99
Hall, Caleb G., N. Y., '85
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Hall, Edwin H., Mass., '99
Hall, Frank H., Ill., '97
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Hall, Isaac Freeman, Mass., '95
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Hall, R. C., Ark., '98
Hallam, Alfred, N. Y., '96
Halland, J. G., N. D., '97
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Halsey, L. R. Ill., '96
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Hamilton, Jas. M., Mont., '95
Hamilton, R. I., Ind., '96
Hamilton, Sam., Pa., '98
Hamilton, Wm., D. C., '98
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Hammel, J. C., Cal., '99
Hancock, John A., Ill., '95
Hand, Laura, Minn., '97
Hand, W. H., S. C., '96
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Hannan, Jas., Ill., '97
Hanson, Myra H., Ohio, '98
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Harris, Abram W., Me., '98
Harris, Ada Van Stone, N. J., '95
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Harris Inst. Lib'y. R. I., '99
Harris, Jas. H., Mich., '98
Harris, Julia A., Ohio, '99
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Harris, T. G., Tex., '95
Harris, Wm. T., D. C., '76
Harrison, Elizabeth, Ill., '95
Harrison, Miles W., Ind., '96
Hart, Albert Bushnell, Mass., '95
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Hartman, E. M., Ohio, '98
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Harvey, L. D., Wis., '84
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Hatch, W. E., Mass., '97
Hatch, W. H., Ill., '95
Haupert, Chas., Ohio, '93
Haupt, J. G., La., '96
Haven, Caroline T., N. Y., '96
Hawn, Linn Marie, N. J., '95
Hayden, H. B., Iowa, '97
Hayden, P. C., Ill., '95
Hayes, Frances C., N. Y., '96
Hayes, H. E., N. Y., '92
Hays, Dudley G., Ill., '97
Hayward, Edw., N. Y., '95
Hayward, Emily A., Ill., '84
Hazen, David H., D. C., '98
Hazen, Lillian D., Cal., '99
Heath, D. C., Mass., '91
Heaton, T. L., Cal., '99
Heermans, Josephine, Mo., '96
Heidler, S. H., Ill., '97
Heiermann, F. J., Ohio, '96
Heineken, J. F. D., N. J., '94
Heizer, John A., Ohio, '99
Helmer, Harry, Ill., '95
Henderson, Mrs. Kate A., Ill., '97
Hendrick, Welland, N. Y., '95
Hendricks, J. P., Mont., '98
Hendrix College, Ark., '97
Henninger, J. W., Ill., '96
Henry, Jas. A., Tenn., '96
Hermanns, Edw. F., Colo., '95
Herrig, Anna B., S. D., '95
Hershman, W. H., Ind., '96.
Hertel, Chas., Ill., '95
Hervey, Henry D., R. I., '96
Hervey, Walter L., N. Y., '95
Herzog, Peter, Mo., '97
Hess, Wm. C., N. Y., '96
Hester, W. A., Ind., '95
Hewes, W. D., N. Y., '96
Hewett, Edgar L., N. Mex., '99
Hewett, Edwin C., Ill., '84
Hewitt, E. T., Cal., '99
Hicks, Mrs. Mary D., Mass., '90
Hill, Frank A., Mass., '95
Hill, Mary, Wis., '96
Hill, Walter B., Ga., '99
Himes, Florence B., N. Y., '94
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Hinsdale, B. A., Mich., '84
Hiser, W. S., Ind., '98
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Hobe, Augusta W., Cal., '89
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Hodgin, Chas. E., N. Mex., '95
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Hoegelsboerger, Nora, D. C., '98
Hofer, Amalie, Ill., '95
Hoffman, Benj. F., Mo., '97
Hoffman, Gaius, N. J., '94
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Hogg, Alex., Tex., '74
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Holden, C. C., N. Y., '98
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Holton, M. Adelaide, Utah, '96
Homans, Amy M., Mass., '91
Hooper, Sanford A., Cal., '89
Hoose, Jas. H., Cal., '79
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Horchem, B. J., Iowa, '97
Hornberger, J. A., Ill., '95
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Houck, Henry, Pa., '97
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Houston, J. R., Ind., '96
Howard, F. E., Conn., '96
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Howe, Agnes E., Cal., '99
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Howe, S. B., N. Y., '95
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Hubbard, F. V., Minn., '95
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Huling, Ray Greene, Mass., '91
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Jones, Arthur O., Ohio, '91
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Jones, Edward N., N. Y., '84
Jones, Emma F., Ill., '97
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Jones, L. H., Ohio, '89
Jones, Lizzie P., Mont., '97
Jones, Mattie, S. D., '94
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Kelly, Dorman S., Ind., '98
Kelly, Kate, La., '96
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Kenyon, A. B., N. Y., '96
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King, Anna H., Ohio, '95
King, C. B., N. C., '99
King, F. A., Ohio, '96
King, Rachel, Conn., '93
King, Wm. F., Iowa, '84
Kinney, Burt O., Cal., '99
Kinsley, M. H., N. J., '92
Kirk, John R., Mo., '91
Kirk, T. H., Cal., '99
Kirk, Thos. J., Cal., '95
Kirkpatrick, E. A., Mass., '97
Kleeberger, Geo. R., Minn., '95
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Knapp, Warren E., Colo., '90
Kneil, Thos. R., N. Y., '95
Knepper, Geo. E., Idaho, '98
Knight, J. A., Ala., '98
Knispel, Henriette M., Ill., '97
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Koehler, Miss M. R., N. Mex., '99
Kolbe, Julia C., Ohio, '95
Kraege, F. G., Wis., '97
Kolbe, Julia C., Ohio, '95
Krall, G. W., Mo., '98
Kratz, H. E., Iowa, '90
Kraus-Boelté, Mrs. M., N.Y., '96
Krécsy, Bela, Hungary, '93
Kroh, Karl J., Ill., '97
Krohn, Wm. O., Ill., '93
Kruse, Edwina B., Del., '91
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Lamar, C. P., Wyo., '99
Lamb, Eli M., Md., '94
Lamb, Rachel E., Md., '94
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Lamberton, Mary J., Pa., '92
Lancaster, E. G., Colo., '99
Lancaster, G., Wash., '98
Landers, J. S., Ore., '99
Landrum, L. M., Ga., '97
Lane, Albert G., Ill., '84
*Lane F. H., N. Y., '96
Lane, Mrs. F. S., Ill., '94
Lang, Ossian H., N. Y., '91
Lansinger, J. W., Pa., '98
Lapey, Louise M., N. Y., '95
Largent, S. D., Mont., '99
Larimer, Henry G., Kan., '86
Lark, F. E., Iowa, '97
Larkins, Chas. D., N. Y., '95
La Taste, Lucien V., Ala., '94
Lathrop, Mrs. C. N., Ohio, '93
Lavers, E. C., Pa., '92
Lawrence, Isabel, Minn., '94
Laws, Annie, Ohio, '95
Lawson, Florence, Cal., '97
Lawton, Chas. E., N. Y., '96
Laylander, O. J., Iowa, '95
Layton, S. Herrick, Ohio, '95
Lazenby, Wm. R., Ohio, '95
Leach, Cephas H., Ill., '97
Leavell, Richard M., Miss., '96
Le Conte, Jos., Cal., '95
Lee, Jas., N. Y., '92
Le Garde, Ellen, R. I., '96
Leipziger, Henry M., N. Y., '91
Leiter, Mrs. Frances W., Ohio, '96
Leland Stanford Univ., Cal., '97
Lemon, Anna E., Cal., '98
Leonard, Albert, N. Y., '91
Leslie, Miss H. S., N. J., '94
Leviston, Irwen, Neb., '95
Lewellen, John O., Ind., '96
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Lightbody, Wm., Mich., '96
Limerick, A. N., Kan., '86
Lincoln Univ., Ill., '97
Ling, Chas. J., Colo., '95
Lipscomb, Dabney, Miss., '92
Little, Clara L., Colo., '95
Locke, John S., Me., '95
Logan, Anna E., Ohio, '96
Loman, John, Minn., '98
Long, J. L., Tex., '96
Long, R. L., Ariz., '98
Longan, G. B., Mo., '97
Look, Frances H., Mass., '96
Loos, Chas. L., Ohio, '95
Lord, L. C., Ill., '94
Lord, Orlando M., Me., '97
Lott, H. C., Mich., '97
Lounsbery, Louise A., N. Y., '96
Lovell, Thomas B., N. Y., '96
Loveridge, L. E., Ill., '98
Low, Seth, N. Y., '95
Lowther, L. A., Kan., '97
Luckey, Edwin D., Mo., '94
Luckey, G. W. A., Neb., '95
Luebke, Emma J., Wis., '97
Lugg, Mary L., Wis., '97
Lukens, Herman T., Pa., '92
Lyman, E. A., Mich., '98
Lynch, Chas. P., Ohio, '94
Lynch, Mary E., Minn., '97
Lynch, M. M., Va., '98
Lynch, Wm. H., Mo., '95
Lyon, Edmund D., Ohio, '98
Lyon, Howard, N. Y., '96
Lyon, Mary A., N. J., '97
Lyon, P. W., N. J., '98
Lyon, W. F., Mich., '97
Lyons, G. K., Ohio, '98
Lyser, Albert, Cal., '98
Lyte, E. Oram, Pa., '91
MacAlister, Jas., Pa., '95
Macdona, Kate P., N. Y., '95
MacDonald, A. H., Cal., '98
MacDonald, John, Kan., '86
MacDonald, Margaret, Ill., '96
MacGowan, W. L., Pa., '96
Mack, Wm. S., Ill., '95
Mackenzie, David, Mich., '96
Mackey, E., Pa., '91
Mackey, Wm. A., N. Y., '94
MacLean, Geo. E., Iowa, '97
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Magovern, Mary A., N. Y., '96
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Mandeville, Jas. M., Mich., '96
Mankell, Nathalie., N. Y., '96
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Manness, S. E., N. J., '92
Marble, A. P., N. Y., '80
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Mark, Cecil W., Cal., '98
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Marlatt, Abby L., R. I., '94
Marquis, J. S., S. C., '98
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Marsh, Miles E., Ky., '98
Marshall, Carl C., Mich., '95
Marshall, T. M., W. Va., '77
Martin, Artemas, D. C., '98
Martin, Geo. H., Mass., '93
Martindale, W. C., Mich., '97
Martineau, J. E., Ark., '98
Marvin, Arthur, N. Y., '98
Mason, Lizzie, Mass., '99
Mason, Wm. A., Pa., '98
Massee, J. Edman, N. Y., '96
Massey, John, Ala., '94
Mather, I. F., Ind., '97

Mathews, Byron C., N. J., '92
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Maxam, Florence, Ill., '99
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Maxwell, Wm. H., N. Y., '92
Maycock, Mark M., N. Y., 96
Mayne, D. D., Wis., '94
McArdle, H. W., N. D., '98
McBride, J. K., Tex., '98
McBroom, Geo. O., Ky., '92
McCabe, C. B., Pa., '96
McCahan, John E., Md., '91
McCallie, J. H., Tenn., '97
McCartney, Livingston, Ky., '95
McCaslin, E. E., D. C., '98
McClintock, O. P. M., Kan., '94
McClung, J. S., Colo., '95
McClure, S. R., Pa., '96
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McConathy, W. J., Ky., '96
McConnell, J. J., Iowa, '95
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McCowen, Mary, Ill., '97
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McCullough, J. F., Ill., '96
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McFarland, Geo. A., N. D., '95
McGinniss, Jas., Ky., '93.
McGlynn, J. J., Ill., '95
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McKay, F. M., Ill., '97
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McKenny, Chas., Mich., '97
McKillop, Anna, Ill., '97
McLauchlin, A. L., Ill., '95
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McMillan, Mrs. R., Ohio, '80
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McMurry, F. M., N. Y., '95
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McNaughton, Jas., Cal., '95
McNeal, Florence, Mo., '92
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McNeill, Mrs. I. C., Wis., '92
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McVicar, Peter, Kan., '86
Mehan, J. M., Iowa, '92
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O'Connor, D. C., Neb., '94
Ogg, R. A., Ind., '97
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O'Keefe, Mrs. S. J., Ill., '96
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Ostrander, Frank, Wis., '97
*Owen, E. H., Ill., '97
Owen, Lincoln, Mass., '96
Owen, W. B., Ill., '96
Packer, Ella L., Iowa, '95
Paessler, V. S., N. Y., '98
Page, R. S., Ill., '96
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Palmer, Francis B., N. Y., '90
Parker, Alice N., D. C., '98
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Parkinson, D. B., Ill., '97
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Payne, Bertha, Ill., '96
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Payne, Wm. R., Tenn., '98
Peacher, A. L., Ark., '96
Peacock, Mary C., Pa., '98
Peairs, H. B., Kan., '97
Peak, Chas. N., Ind., '96
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Pearson, H. C., Pa., '99
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Pease, N. W., N. J., '94
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Phillips, Hattie A., Iowa, '96
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Philomathean Lit. Soc., Pa., '98
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Pierce, Edw. T., Cal., '89
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Pierce, Lovich, D. C., '98
Pierce, Mary R., Ill., '97
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Pike, Joshua, Ill., '91
Pinkerton, T. B., Ohio, '99
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Plimpton, Geo. A., N. Y., '94
Plumer, Geo. M., Ohio, '96
Poland, A. B., N. J., '92
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Powers, Jas. K., Ala., '95
Pratt, R. H., Pa., '98
Pray, Mabel L., Ohio, '97
Pray, T. B., Wis., '94
Preece, Mrs. Louise, Minn., '94
Prentiss, H. W., Mo., '97
Preston, J. R., Miss., '90
Prettyman, E. B., Md., '92
Prichard, E. H., Ohio, '95
Prichard, Margaret S., Pa., '98
Prillerman, Byrd, W. Va., '91
Prince, John T., Mass., '91
Pringle, Wm. J., Ill., '96
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Raab, Henry, Ill., '84
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Radcliffe, Emily H., N. Y., '99
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Ralston, Jas. M., N. J., '92
Ramsay, Chas. C., Mass., '93
Ramsey, Geo. J., La., '89
Ransom, Frances E., N. Y., '99
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Rankin, A. W., Minn., '93
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Reid, Jas., Mont., '95
Reigart, J. F., N. Y., '99
Reiley, Cynthia E., Mont., '95
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Remington, L. D., Mich., '96
Rennick, Louise D., Ill., '97
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Requa, M. Augusta, N. Y., '99
Ressler, Edwin D., Ore., '92
Reveley, Ellen G., Ohio, '91
Reynolds, Chas. B., Mo., '95
Reynolds, J. H., Ark., '97
Rhoads, McHenry, Ky., '91
Rice, Emily A., N. J., '92
Rice, Gratia L., N. Y., '89
Rice, J. M., N. Y., '95
Rice, Wm. N., Conn., '99
Richards, C. R., N. Y., '98
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**Richards, Zalmon*, D. C., '57
Richardson, Geo. M., Cal., '99
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Rickmond, Sarah E., Md., '76
Riddle, W., Pa., '96
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Ridgeway, Wm. C., Mo., '98
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Riley, Mrs. M. E., Mo., '90
Riste, Ernest, Wash., '99
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Rivers, W. W., Ark., '95
Roach, T. W., Kan., '86
Robbins, C. W., Mo., '92
Robbins, Geo. A., Ill., '97
Robert, Jas. A., Ohio, '82
Roberts, Flora, Ind., '96
Roberts, Hester A., N. Y., '94
Roberts, H. L., Ill., '97
Roberts, L. D., Wis., '97
Roberts, Wm. E., Ohio, '98
Robertson, J. L., Ill., '97
Robertson, P. W., D. C., '96
Robinson, Albert R., Ill., '95
Robinson, Lucy, W. Va., '96
Robinson, Oscar D., N. Y., '92
Robinson, W. S., Ohio, '95
Rocheleau, W. F., Ill., '96
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Rogers, Dora B., N. C., '96
Rogers, Howard J., N. Y., '96
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Rogers, Josephine E., N. Y., '93
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Roop, C. Y., Cal., '86
Rose, Geo. E., Kan., '86
Rose, S. L., Ohio, '96
Ross, M. M., Tenn., '99
Ross, Pete, Minn., '99
Roth, Anna C., Ky., '97
Rounds, Chas. C., N. Y., '76
Rowe, Alex. M., Minn., '94
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Rowe, Mary E., Ill., '95
Rowe, Stuart H., Conn., '98
Rowe, W. S., Ind., '95
Rowland, J. H., Ohio, '96
Royal, M. G., Wash., '96
Rudolph, Ida, Ky., '96
Russell, Jas. E., N. Y., '95
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Sabin, Albert R., Ill., '84
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Sabin, Henry, Iowa, '89
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Sale, A. R., Iowa, '97
Salisbury, Albert, Wis., '87
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Scholfield, Bessie M., R. I., '96
Schreiber, Mae E., Wis., '96
Schryver, Anna A., Mich., '96
Schurman, J. G., N. Y., '96
Schuyler, Aaron, Kan., '86
Schuyler, E. H., N. J., '94
Scofield, Bertha, N. D., '97
Scott, Chas. B., P. R., '90
Scott, Edith A., Minn., '99
Scott, E. H., Ill., '95
Scott, F. N., Mich., '97
Scott, Harriet M., Cal., '96
Scott, Izora, Colo., '97
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Searle, Miss S. M., N. J., '93
Seaver, Edwin P., Mass., '93
Sedgwick, Wm. T., Mass., '99
Seeley, Levi, N. J., '90
Seerley, H. H., Iowa, '89
Sellars, D. Francis, Ill., '96
Selleck, W. F. F., Minn., '98
Sewall, May W., Ind., '97
Sexton, E. K., N. J., '97
Shanahan, Rev. J. W., Pa., '95
Sharkey, J. P., Ohio, '90
Sharkley, Mrs. H. B., Cal., '99
Shaw, A. L., Neb., '97
Shaw, Edw. R., N. Y., '93
Shaw, Sam., Wis., '84
Shawan, J. A., Ohio, '94
Shear, S. R., N. Y., '95
Shearer, W. J., N. J., '95
Shearer, W. S., Iowa, '97
Sheats, W. N., Fla., '93
Sheber, Cora, Ark., '98
Sheldon, Geo. M., Cal., '99
Sheldon, Wm. E., Mass., '57
Shelley, W. H., Md., '95
Shepard, Geo. C., Va., '97
Shepard, Irwin, Minn., '83
Sheppard, L. W., Ohio, '98
Shinn, Josiah H., Ark., '90
Shippen, Edw., Pa., '79
Shirk, David F., Kan., '95
Shives, Julia, Ark., '98
Shoemaker, W. A., Minn., '95
Shorney, Geo. H., Ill., '97
Shrieves, Emma, Wis., '96
Shull, U. P., Cal., '99
Shumaker, F. P., Ohio, '99
Shutts, Geo. C., Wis., '96
Sibley, Chas. A., Mass., '95
Siefert, H. O. R., Wis., '95
Sigler, P. N., Ohio, '98
Silcox, Julia C., Ohio, '97
Silke, Lucy S., Ill., '93
Silver, Edgar O., N. Y., '94
Simerwell, E. A., Kan., '95

Simonds, H. A., Wis., '95
Sims, J. F., Wis., '97
Sinclair, S. B., Can., '91
Singer, Edgar A., Pa., '80
Sisson, E. O., Ill., '97
Skidmore, Sydney T., Pa., '95
Skinner, Chas. R., N. Y., '90
Skinner, Wm. C., Ohio, '95
Slack, H. W., Minn., '97
Slade, Jas. P., Ill., '95
Slaton, W. F., Ga., '97
Slaton, W. M., Ga., '94
Slauson, H. M., Mich., '94
Sloane, Clyde, Ill., '98
Smallwood, Mabel E., Ill., '96
Smart, Jas. H., Ind., '77
Smedley, Eva A., Ill., '97
Smiley, Wm. H., Colo., '92
Smith, A. J., Minn., '98
Smith, Alex., Ill., '99
Smith, Arthur P., Mass., '90
Smith, A. Thos., Pa., '93
Smith, Anna T., D. C., '95
Smith, Mrs. C. B., Ill., '98
Smith, E. E., Ill., '96
Smith, E. R., Ill., '97
Smith, Euler B., Ga., '87
Smith, F. P., Kan., '97
Smith, Geo. M., S. D., '95
Smith, Geo. W., Ill., '99
Smith, Harriet E., Wis., '97
Smith, Henry B., Colo., '99
Smith, H. J., N. Y., '95
Smith, J. F., Iowa, '97
Smith, J. F., Ohio, '98
Smith, J. Mace, N. Y., '95
Smith, Jos. R., Pa., '99
Smith, M. B., Mass., '99
Smith, Sidney F., Colo., '95
Smith, Wm. G., Minn., '95
Smyth, W. S., Ill., '95
Snedden, D. S., Cal., '99
Snell, Laura R., N. Y., '99
Snow, Bonnie E., Minn., '96
Snow, Francis H., Kan., '93
Snow, Mary S., Me., '98
Snyder, A. J., Ill., '97
Snyder, Henry, N. J., '94
Snyder, Jessie M., Ga., '97
Snyder, J. H., Ohio, '96
Snyder, J. L., Mich., '89
Snyder, Lydia E., Ill., '95
Snyder, W. R., Ind., '95
Snyder, Z. X., Colo., '87
Snyder, Mrs. Z. X., Colo., '96
Soldan, F. Louis, Mo., '77
Sollitt, Alice E., Ill., '93
Somers, E. J., D. C., '98
Soulé, Geo., La., '92
Southall, J. W., Va., '98
Spangler, H. T., Pa., '94
Spaulding, F. E., N. J., '96
Spaulding, Randall, N. J., '92
Spayd, H. H., Pa., '92
Speer, W. W., Ill., '96
Spencer, Catherine, Mo., '97
Spencer, Pauline W., Pa., '93
Spencer, Robt. C., Wis., '84
Spencer, Mrs. Sara A., D. C., '92
Spero, Anna K., Cal., '77
Spindler, J. W., Kan., '99
Springer, Durand W., Mich., '94
Squire, Mary V., N. Y., '96
Stanford, Alma B., Minn., '97
Stanley, Edmund, Kan., '86
Staples, Helen F., Minn., '96
Stark, Joshua, Wis., '84
Starke, N. C., Va., '99
Starrett, Mrs. H. E., '97
State Agri. Coll., Kan., '97
St. Historical Soc., Wis., '84
State Library, Cal., '99
State Library, Mass., '98
St. N. and Ind. Coll., N. C., '98
St. N. Sch., California, Pa., '98
St. N. Sch., Cedar Falls, Iowa, '97
St. N. Sch., Chico, Cal., '97
St. N. Sch., De Kalb, Ill., '99
St. N. Sch., Ellensburg, Wash., '97
St. N. Sch., Fitchburg, Mass., '98
St. N. Sch., Greeley, Colo., '97
St. N. Sch., Los Angeles, Cal., '97
St. N. Sch., Mankato, Minn., '99
St. N. Sch., Mansfield, Pa., '97
St. N. Sch., Millersville, Pa., '97
St. N. Sch., Moorhead, Minn., '97
St. N. Sch., New Paltz, N. Y., '99
St. N. Sch., Normal, Ill., '98
St. N. Sch., Oshkosh, Wis., '98
St. N. Sch., Platteville, Wis., '84
St. N. Sch., Providence, R. I., '97
St. N. Sch., San José, Cal., '98
St. N. Sch., St. Cloud, Minn., '97
St. N. Sch., Terre Haute, Ind., '97
St. N. Sch., Trenton, N. J., '97
St. N. Sch., Westfield, Mass., '97
St. N. Sch., Whitewater, Wis., '98
St. N. Sch., Winona, Minn., '97
St. Teachers' Asso. of Ill., '90
St. Univ. Library, Iowa, '97
St. Univ. Library, Ohio, '97
Stearns, J. W., Wis., '84
Steele, Wm. L., Ill., '90
Steere, E. A., Mont., '96
Stehman, J. H., Ill., '97
Stein, F. W., Cal., '99
Stephens, H. Morse, N. Y., '96
Stephenson, Lillie S., Ill., '95
Stern, Menco, N. Y., '82
Stetson, W. W., Me., '95
Stevens, Moses C., Ind., '76
Stevens, Plowden, Jr., N. Y., '95
Stevenson, A. L., Ill., '97
Stevenson, Wm. C., Kan., '90
Stewart, I. N., Wis., '84
Stewart, John A., Mich., '84
Stewart, Jos. S., Ga., '95
Stewart, N. Coe, Ohio, '92
Stewart, Sarah A., N. Y., '84
Stickney, Lucia, Ohio, '93
Stigall, Oliver, Mo., '98
Stitt, E. W., N. Y., '96
Stockman, Mary E., N. Y., '96
Stockwell, Mrs. H. H., N. D., '94
Stockwell, Thos. B., R. I., '91
Stockwell, Walter L., N. D., '94
Stokes, Horace A., Ohio, '95
Stokes, Susan G., Utah, '99
Stone, Mason S., Vt., '94
Stone, W. W., Cal., '99
Stoneroad, Rebecca D., D. C., '96
Storm, A. V., Iowa, '94
Stout, Geo. H., Pa., '84
Stout, Isaac H., N. Y., '90
Stout, J. D., Iowa, '98
Stovall, Anna M., Cal., '99
Stowell, Thos. B., N. Y., '91
Strachan, Alex., S. D., '97
Stratton, C. C., Ore., '88
Stratton, F. E., Minn., '86
Straubenmüller, G., N. Y., '97
Strine, J. H., Cal., '99
Stroeter, E. H., Mo., '99
Strong, Edwin A., Mich., '92
Strong, Jas. W., Minn., '95
Stuart, Giles A., Conn., '99
Stubbs, J. E., Nev., '95
Study, J. N., Ind., '97
Stuver, E., Colo., '95
Sudborough, Mrs. G., Neb., '80
*Sullivan, Christine, Ohio, '86
Summers, Alex., D. C., '98
Super, Chas. W., Ohio, '91
Suplee, Etta, Iowa, '95
Suplee, Fannie, Iowa, '95
Supt. and Prin. Asso., Wis., '84
Suter, Anna, Ind., '90
Suter, Miss H. A., La., '94
Sutherland, Marg. W., Ohio, '95
Sutton, W. S., Tex., '95
Suydam, V. A., Wis., '99
Swain, Jos., Ind., '93
Swan, Lizzie P., Wis., '97
Swanger, F. A., Cal., '99
Swart, Rose C., Wis., '95
Swett, John, Cal., '99
Swiler, J. W., Wis., '97
Swingle, W. M., N. J., '98
Swoboda, Dora, Ky., '97
Syphax, Carrie E., D. C., '95
Syracuse Cent. Lib., N. Y., '98
Tadd, J. Liberty, Pa., '92
Tait, Elizabeth S., Pa., '98
Talbot, Henry, Ill., '92
Tanner, J. M., Utah, '97
Tapley, Wm. W., Mass., '92
Tappan, David S., Ohio, '99
Tarbell, Horace S., R. I., '91
Tarr, Ralph S., N. Y., '99
Tate, W. K., S. C., '99
Taubman, Kate, S. D., '94
Tawney, Guy A., Wis., '98
Taylor, Allyn O., Cal., '99
Taylor, A. R., Kan., '86
Taylor, Edw., Ky., '96
Taylor, Henry J., Iowa, '84
Taylor, Jos. S., N. Y., '94
T'chs' Asso., Cowley Co., Kan., '86
T'chs' Asso., Riley Co., Kan., '86
Teachers' Association, Wis., '84
T'chs' Coll., Dept. Man. Tr., N. Y., '99
T'chs' Inst., Phila., Pa., '79
Templeton, J. C., Cal., '94
Terrel, Harriet E., Ohio, '96
Terrell, Mary C., D. C., '98
Terry, Miss J. L., Wis., '97
Thames, W. I., Miss, '97
Tharpe, F. D., Mo., '91
Thayer, Ada F., N. Y., '96
Theilman, Louis, Mo., '95
Thiry, J. H., N. Y., '97
Thomas, Blanche T., Okla., '98
Thomas, D. W., Ind., '96
Thomas, Emma A., Mich., '96
*Thomas, Miss M. J. B., N. J., '96
Thomas, R. S., Ohio, '96
Thomas, W. Scott, Cal., '99
Thompson, D. M., N. C., '98
Thompson, E. C., Mich., '94
Thompson, Fannie E., Ohio, '99
Thompson, H. E., Okla., '95
Thompson, John G., Mass., '95
Thompson, L. S., N. J., '76
Thompson, O. D., Mich., '96
Thompson, T. E., Mass., '97
Thompson, Wm. O., Ohio, '94
Thomson, Frank D., Ill., '95
Thorndyke, E. L., N. Y., '98
Thorson, I. A., Md., '98
Thudium, C. C., Mo., '98
Thurber, Chas. H., Ill., '93
Thwing, Chas. F., Ohio, '95
Tibbets, Anna, Neb., '94
Tibbetts, A. C., Minn., '95
Tillotson, D. C., Kan., '86
Tilton, Chas. S., Wash., '99
Tinker, B. W., Conn., '97
Titus, Cynthia, Iowa, '97
Todd, Emma J., Ill., '97
Todd, Samuel B., Wis., '95
Tolman, Henry L., Ill., '97
Tompkins, A., Ill., '96
Tormey, J. A., Minn., '97
Tower, Belle M., Mich., '97
Townsend, H. S., H. I., '99
Tracy, Frank N., Ill., '96
Trant, Amelia Earle, N. Y., '96
Trask, H. M., Pa., '95
Travell, Ira W., N. J., '97
Tressler, A. W., Wis., '92
Treudley, F., Ohio, '91
Trotter, J. R., W. Va., '97
Trowbridge, G. S., Cal., '99
Tucker, Anna M. P., Ohio, '96
Tulloch, Mrs. M., D. C., '98
Turner, Alfred, Mass., '95
Turner, J. E., Ill., '95
Turner, J. M., Wis., '97
Turner, Marie L., Mo., '95
Tuttle, Albert H., Va., '96
Tuttle, Wm. L., N. Y., '99
Tutwiler, Julia S., Ala., '82
Twichell, Hattie, Mass., '95

Twining, Nathan C., Cal., '84
Twiss, Geo. R., Ohio, '94
Tynan, T. T., Wyo., '99
Underhill, Volney, Ill., '93
University, Atlanta, Ga., '95
University, Columbia, N. Y., '95
University, Cornell, N. Y., '96
University, Harvard, Mass., '95
University, Leland Stanford Jr., Cal., '97
University, Lincoln, Ill., '97
University, Miami, Ohio, '95
University, West Virginia, '99
University of California, '95
University of Georgia, '95
University of Illinois, '99
University of Iowa, '97
University of Michigan, '98
University of Missouri, '95
University of Nebraska, '98
University of N. Carolina, '99
University of Ohio, '97
University of Oklahoma, '99
University of Omaha, Neb., '97
University of State of N. Y., '93
University of Pennsylvania, '98
University of Texas, '98
University of Utah, '95
University of Washington, '98
University of Wyoming, '97
Updegraff, H., Iowa, '99
Upton, R. R., Ohio, '98
Vail, Henry H., N. Y., '97
Vaile, E. O., Ill., '95
Van Aken, Mrs. G., N. Y., '84
Vance, Sophie, Ohio, '90
Van Cleve, C. L., Ohio, '96
Van Cleve, Edw. M., Ohio, '97
Vandyke, J. A., Minn., '96
Van Liew, Chas. C., Cal., '94
Van Ostrand, B. D., Kan., '96
Van Rensselaer, Martha, N. Y., '94
Van Sickle, Jas. H., Colo., '92
Van Tassel, I. N., Ohio, '98
Vassar College, N. Y., '98
Veatch, Nathan T., Ill., '95
Vert, Edmund J., S. D., '95
Viebahn, Chas. F., Wis., '84
Virtue, G. O., Minn., '98
Vroom, W. F., N. Y., '98
Wabash College, Ind., '95
Wade, Margaret L., N. J., '94
Wagner, Harr, Cal., '99
Wakeman, J. W., N. J., '92
Waldo, Eveline A., La., '97
Walke, Matilda L., Ohio, '92
Walker, B. M., Miss., '99
Walker, E. W., Wis., '97
Walker, M. Edna, Cal., '99
Walker, P. R., Ill., '90
Walker, R. E., Ill., '99
Walrath, M. H., N. Y., '96
Walsh, J. H., N. Y., '95
Walter, Mary, Ohio, '98
Walter, Sarah J., Conn., '98
Walton, Geo. A., Mass., '92
Ward, Henry B., Neb., '97
Ware, N. E., Ga., '96
Waring, J. H. N., Md., '98
Warner, A. B., Iowa, '94
Warner, Chas. F., Mass., '99
Warr, J. W., Ill., '95
Washburn, Kirk N., Mass., '96
Waterbury, R. A., Wis., '96
Waterhouse, A. H., Neb., '96
Waterman, Richard, Ill., '96
Watson, Edith M., Wis., '97
Watt, W. E., Ill., '95
Weaver, E. W., Ky., '97
Webb, Louis K., Cal., '99
Weber, A. W., Wis., '97
Weber, H. C., Tenn., '97
Webster, R. H., Cal., '99
Webster, W. F., Minn., '96
Weeks, C. W., Ill., '95
Weld, Frank A., Minn., '95
Wellers, Meta, Ill., '99
Welles, Frank E., N. Y., '95
Welsh, J. P., Pa., '96
Weldon, Edw., Pa., '98
Wentz, Etta L., N. Y., '96
Wernick, E. V., Wis., '95
West, Andrew F., N. J., '99
West, Claude L., N. J., '98
Westcott, Edith, D. C., '98
Westcott, O. S., Ill., '95
Western, The, Ohio, '99
Westervelt, Z. F., N. Y., '97
Westfall, Mary B., Ohio, '97
West Virginia Univ., '99
Wheatley, Emma, Neb., '95
Wheaton, Ellen F., Minn., '97
Wheeler, Henry N., Mass., '92
Wheelock, Chas. F., N. Y., '95
Whipple, H. A., Wis., '97
Whitcomb, Arthur K., Mass., '92
White, Chas. G., Mich., '95
White, Dan. A., Ill., '95
White, Dan. H., Cal., '99
White, Emerson E., Ohio, '70
White, Fred. C., N. Y., '99
White, H. C., Ga., '96
White, J. T., Md., '98
White, J. U., Mo., '87
White, Wm. M., Ohio, '96
White, W. S., Mich., '97
White, W. T., Tenn., '89
Whiteford, J. A., Mo., '95
Whitehill, O. P., N. Mex., '99
Whitford, Wm. C., Wis., '84
Whiting, M. M., Cal., '99
Whitman, B. L., D. C., '95
Whitney, Allen S., Mich., '94
Whitney, M. A., Ill., '91
Whitney, O. C., Wash., '98
Whitney, S. Emory, Mich., '93
Whittemore, Henry, Mass., '95
Whittle, W. R., R. I., '96
Wiard, Louise A., Ky., '96
Wicks, John F., Ill., '97
Wicks, M. B., Pa., '99
Widner, Esther A., Ohio, '80
Wilcox, Jessie B., Wash., '99
Wiley, Wm. H., Ind., '96
Wilkins, A. H., Tex., '94
Wilkinson, J. J., Ill., '96
Wilkinson, J. N., Kan., '84
Wilkinson, Warring, Cal., '99
Willard, F. E., Iowa, '96
Williams, Anna L., Cal., '99
Williams Coll. Library, Mass., '97
Williams, Mrs. Delia, Ohio, '70
Williams, J. D., Ill., '96
Williams, L. W., N. J., '98
Williams, M. Ida, Cal., '99
Williams, Philo J., Kan., '86
Williams, Sherman, N. Y., '98
Williams, T. E., Ga., '95
Williams, Thyrza C., N. J., '97
Williams, W. H. Mo., '95
Williams, Wm. H., Wis., '97
Williams, Wm. J., Neb., '95
Williamson, J. E., Iowa, '95
Williamson, Martha S., Ohio, '99
Willis, D. M., W. Va., '95
Willis, H. B., N. J., '92
Willis, W. A., Iowa, '84
Wilson, A. H., N. J., '96
Wilson, C. B., Mass., '96
Wilson, Harry G., Ill., '95
Wilson, H. E., Ariz., '95
Wilson, J. H., D. C., '98
Wilson, J. Ormond, D. C., '80
Wilson, Mrs. L. L. W., Pa., '99
Wilson, V. L., Iowa, '97
Wilson, W. B., S. C., '99
Wilson, Wm. E., Wash., '90
Windate, Ida M., Ohio, '96
Winne, Jas., N. Y., '92
Winship, Albert E., Mass., '92
Winston, Geo. T., N. C., '96
Winters, T. H., Ohio, '97
Winterburn, Rose V., Cal., '99
Winterton, Jessie M., N. Y., '97
Winthrop, Nor. Sch., S. C., '95
Wirick, L. A., Kan., '97
Wise, Henry A., Md., '85
Wise, W. J., Colo., '95
Witchard, J. H., Ga., '96
Witherspoon, Jas. H., Ark., '99
Witmer, Chas. K., Pa., '94
Witmer, Lightner, Pa., '98
Witter, F. M., Iowa, '97
Witter, J. C., N. Y., '98
Wolfe, H. K., Neb., '96
Wolfe, L. E., Kan., '90
Wood, Court F., D. C., '97
Wood, Emory M., Kan., '89
Wood, Jas. A., N. Mex., '97
Wood, John A., Ind., '98
Wood, O. M., Mo., '93
Woodhull, J. F., N. Y., '99
Woodley, O. I., Mich., '96
Woodmansee, M. A., Ohio, '98
Woods, Francis M., Ill., '96
Woodward, C. F., Iowa, '97
Woodward, C. M., Mo., '87
Woodward, F. C., S. C., '99
Woodward, J. C., Ga., '97
Woody, H. G., Ind., '93
Wooley, L. C., N. J., '93
Wright, A. M., N. Y., '93
Wright, Anna J., Ohio, '94
Wright, Edmund W., Vt., '89
Wright, L. L., Mich., '96
Wright, Lydia H., Ariz., '95
Wright, Wm. R., N. J., '92
Wylie, Mrs. M. J. B., N. Y., '91
Yerby, John D., Ala., '95
Yoder, A. H., Ind., '96
Young, J. B., Iowa, '96
Young, J. S., Ohio, '95
Young, Nathan B., Ga., '96
Young, Robert G., Ill., '89
Ziek, Mary, Iowa, '98
Zillafro, Margaret C., Pa., '96
Zimmerman, C. F. A., Wis., '95
Zirkle, H. W., Colo., '98
Zook, Mrs. Laura, Mont., '97.

CLASSIFIED MEMBERSHIP BY STATES

IN THE

NATIONAL EDUCATIONAL ASSOCIATION

FOR THE YEAR 1899—(LOS ANGELES MEETING)

State or Territory	Active Membership					Associate Membership	Total Membership
	Life Directors	Life Members	Former Active Members	New Active Members	Total Active Membership		
Total,	35	134	1,636	399	2,204	11,452	13,656
North Atlantic Division,	11	23	471	87	592	1,285	1,877
South Atlantic Division,	4	9	116	27	156	205	361
South Central Division,	3	2	122	17	144	674	818
North Central Division,	15	89	789	118	1,011	4,063	5,074
Western Division,	2	11	134	150	297	5,190	5,487
Foreign,	....	....	4	....	4	35	39
North Atlantic Division—							
Maine,	....	....	8	1	9	7	16
New Hampshire,	....	....	....	2	2	12	14
Vermont,	....	1	1	1	3	8	11
Massachusetts,	2	2	95	14	113	181	294
Rhode Island,	1	....	13	3	17	33	50
Connecticut,	....	1	14	4	19	27	46
New York,	6	12	201	35	254	502	756
New Jersey,	....	1	69	5	75	79	154
Pennsylvania,	2	6	70	22	100	436	536
South Atlantic Division—							
Delaware,	....	....	3	....	3	6	9
Maryland,	....	1	17	6	24	26	50
District of Columbia,	3	3	41	3	50	49	99
Virginia,	....	....	8	2	10	12	22
West Virginia,	1	1	8	4	14	15	29
North Carolina,	....	2	9	4	15	12	27
South Carolina,		1	6	5	12	10	22
Georgia,	....	1	21	2	24	63	87
Florida,	....	....	3	1	4	12	16
South Central Division—							
Kentucky,	1	2	26	4	33	103	136
Tennessee,	2	....	11	2	15	98	113
Alabama,	....	....	15	1	16	53	69
Mississippi,	....	....	9	2	11	54	65
Louisiana,	....	....	12	1	13	47	60
Texas,	....	....	16	2	18	203	221
Arkansas,	....	....	28	2	30	66	96
Oklahoma,	....	....	5	3	8	39	47
Indian Territory,	....	....	....	....	....	11	11
North Central Division—							
Ohio,	1	14	124	25	164	416	580
Indiana,	1	2	64	8	75	279	354
Illinois,	5	8	213	35	261	955	1,216
Michigan,	2	....	54	7	63	133	196
Wisconsin,	....	35	84	5	124	163	287
Iowa,	1	2	55	3	61	532	593
Minnesota,	1	2	64	12	79	188	267
Missouri,	2	3	51	11	67	606	673
North Dakota,	....	....	12	....	12	26	38
South Dakota,	....	....	10	4	14	72	86
Nebraska,	....	3	28	5	36	295	331
Kansas,	2	20	30	3	55	398	453
Western Division—							
Montana,	....	1	13	3	17	53	70
Wyoming,	....	....	3	2	5	8	13
Colorado,	1	1	40	11	53	412	465
New Mexico,	....	....	8	7	15	75	90
Arizona,	....	....	3	11	14	144	158
Utah,	....	....	7	3	10	96	106
Nevada,	....	....	2	1	3	46	49
Idaho,	....	....	3	2	5	27	32
Washington,	....	1	10	6	17	39	56
Oregon,	1	1	5	2	9	70	79
California,	....	7	37	98	142	4,215	4,357
Alaska,	....	....	1	....	1	....	1
Hawaii,	....	....	1	3	4	5	9
Puerto Rico,	....	....	1	1	2	....	2
Foreign—							
Canada,	....	....	3	....	3	32	35
Africa,	....	....	....	....	....	1	1
Holland,	....	....	....	....	....	1	1
Germany,	....	....	....	....	....	1	1
Hungary,	....	....	1	....	1	....	1

RECORD OF MEMBERSHIP BY STATES

IN THE

NATIONAL EDUCATIONAL ASSOCIATION

FOR EACH YEAR FROM 1884–99, INCLUSIVE,

Excepting for 1893, when no regular meeting was held. Heavier numbers show membership from the state in which the meeting for the year was held.

State or T'y	Madison	Saratoga	Topeka	Chicago	San Francisco	Nashville	St. Paul	Toronto	Saratoga	Asbury Park	Denver	Buffalo	Milwaukee	Washington	Los Angeles	Total	Average Membership
	1884	1885	1886	1887	1888	1889	1890	1891	1892	1894	1895	1896	1897	1898	1899		
Total . .	2,729	625	1,197	9,115	7,216	1,984	5,474	4,778	3,360	5,915	11,297	9,072	7,111	10,533	13,656	94,062	6,271
N. Atlantic Div.	792	406	386	773	803	101	795	426	1,187	1,711	1,462	2,940	942	1,492	1,877	16,093	1,073
S. Atlantic Div.	77	16	31	44	113	128	95	151	309	271	289	237	172	1,146	361	3,440	229
S. Central Div.	111	19	47	370	216	1,074	261	417	253	460	899	419	304	1,588	818	7,256	457
N. Central Div.	1,712	176	708	7,071	1,074	642	4,156	2,933	1,456	3,357	7,211	5,083	5,315	5,882	5,074	52,450	3,497
Western Div.	26	7	25	102	4,974	38	122	196	104	73	1,403	377	366	412	5,487	13,712	915
Foreign . .	11	1	..	155	36	1	45	655	51	43	33	16	12	13	39	1,111	74
N. Atlantic Div.																	
Maine . .	21	2	5	25	11	..	32	30	10	5	24	7	7	10	16	205	14
N. Hampshire	64	6	10	23	11	..	32	9	5	7	27	8	6	6	14	228	15
Vermont .	43	8	3	41	4	..	40	4	20	4	13	14	15	11	11	231	15
Massachusetts	310	145	85	277	206	28	290	114	212	52	191	197	159	159	294	2,719	181
Rhode Island	50	13	13	29	30	4	31	42	23	12	55	35	23	36	50	436	29
Connecticut	40	18	23	36	48	4	31	18	63	13	26	43	24	31	46	454	30
New York .	143	159	91	211	210	29	228	117	611	326	521	2,132	411	509	756	6,457	430
New Jersey	40	27	35	23	41	13	12	16	65	969	168	179	110	172	154	1,852	123
Pennsylvania	81	28	121	108	242	23	99	76	178	323	437	325	187	558	536	3,322	231
S. Atlantic Div.																	
Delaware .	1	..	4	..	3	1	2	5	6	8	17	11	8	9	9	84	5
Maryland .	5	..	10	8	17	3	7	13	49	45	53	23	31	80	50	395	26
District of Col.	30	1	7	12	32	13	21	10	35	24	47	29	57	382	99	802	53
Virginia . .	6	4	3	2	18	12	2	8	2	24	36	21	10	63	22	232	15
West Virginia	15	3	3	8	6	6	27	49	20	37	49	52	16	129	29	448	30
N. Carolina	3	2	..	2	8	12	2	13	17	15	5	14	4	76	27	192	13
S. Carolina .	5	4	1	2	13	22	4	18	14	52	1	31	7	92	22	285	19
Georgia . .	11	1	2	10	16	43	23	31	163	64	62	43	30	261	87	847	56
Florida . .	1	1	1	..	..	16	7	4	3	2	19	13	9	54	16	145	10
S. Central Div.																	
Kentucky .	33	2	8	151	22	114	39	57	42	128	176	77	98	408	136	1,499	99
Tennessee .	12	6	5	62	83	607	97	124	57	124	66	57	25	248	113	1,686	112
Alabama .	9	1	1	16	45	123	35	79	51	41	41	59	25	229	69	824	55
Mississippi .	7	1	2	7	10	87	44	42	36	20	49	25	19	100	65	514	34
Louisiana .	3	7	8	11	7	19	13	25	21	35	108	25	42	146	60	530	35
Texas . .	22	1	15	55	29	89	20	53	9	82	294	99	41	257	221	1,287	86
Arkansas .	22	..	8	67	12	29	12	34	33	25	84	63	41	132	96	655	44
Oklahoma .	..	..	..	..	..	..	..	..	..	4	58	14	11	60	47	194	32
Indian T'y .	3	1	..	1	8	6	1	3	4	1	23	..	2	7	11	71	4
N. Central Div.																	
Ohio . . .	121	43	67	581	225	60	361	355	178	990	592	565	357	1,313	580	6,388	426
Indiana . .	54	15	46	418	71	89	206	149	65	258	321	250	205	591	354	3,092	206
Illinois . .	354	33	164	1,750	222	204	625	666	214	871	1,495	1,174	785	1,340	1,216	11,111	741
Michigan .	77	12	20	273	40	29	137	259	285	155	204	589	327	379	196	2,982	199
Wisconsin .	546	18	18	486	57	28	443	222	72	143	188	413	1,870	361	287	5,151	343
Iowa . . .	304	18	87	1,146	96	67	572	278	110	164	1,086	578	543	383	593	6,025	402
Minnesota .	132	9	11	649	58	16	933	118	54	86	193	303	333	164	267	3,326	222
Missouri .	46	11	73	625	133	68	249	320	189	435	1,113	406	285	795	673	5,421	362
North Dakota	23	1	5	149	8	7	99	32	16	8	28	34	53	26	38	334	37
South Dakota							109	31	20	9	78	83	118	45	86	579	64
Nebraska .	39	5	27	634	40	10	147	220	126	127	742	363	251	103	331	3,165	211
Kansas . .	16	11	190	960	124	64	275	283	127	111	1,171	325	187	382	453	4,679	312
Western Div.																	
Montana .	3	1	1	9	4	5	37	24	9	3	15	43	78	20	70	322	21
Wyoming .	1	2	2	8	8	..	5	13	4	2	48	7	10	8	13	133	9
Colorado .	12	2	11	40	109	8	56	114	59	58	1,136	177	145	196	465	2,588	173
New Mexico	..	..	..	2	26	2	1	7	5	..	26	16	21	27	90	223	19
Arizona . .	..	..	..	1	45	1	1	..	2	2	11	6	6	21	158	254	21
Utah . . .	..	1	3	4	127	..	..	10	8	4	89	37	22	25	106	436	31
Nevada . .	1	..	1	6	134	..	1	..	..	..	2	5	3	2	49	204	14
Idaho . . .	..	..	1	..	12	..	..	..	1	1	3	10	6	3	32	69	5
Washington	1	..	1	3	27	1	6	18	1	2	6	16	8	12	56	158	11
Oregon . .	3	1	1	11	204	8	7	5	5	..	14	9	7	10	79	364	24
California .	5	..	4	18	4,278	13	8	5	10	1	53	51	56	87	4,357	8,946	596
Alaska . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1
Hawaiian Isls.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	9	9
Puerto Rico	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2
Foreign . . .	11	1	..	155	36	1	45	655	51	43	33	16	13	13	39	..	..

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IRWIN SHEPARD, *Secretary*,
Winona, Minn.

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